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COLONIAL REPORTS—ANNUAL

No. 1885

Annual Report on the Social and Economic  
Progress of the People of

NYASALAND, 1937

(*For Reports for 1935 and 1936 see Nos. 1776 and 1824  
respectively (Price 2s. 6d. each.).*)

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# ANNUAL REPORT ON THE SOCIAL AND ECONOMIC PROGRESS OF THE PEOPLE OF NYASALAND FOR THE YEAR 1937

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## CONTENTS

CHAPTER	PAGE
I. GEOGRAPHY, CLIMATE AND HISTORY	2
II. GOVERNMENT	5
III. POPULATION	6
IV. HEALTH	7
V. SANITATION AND HOUSING	11
VI. NATURAL RESOURCES	12
VII. COMMERCE	27
VIII. LABOUR	33
IX. WAGES AND COST OF LIVING	34
X. EDUCATION AND WELFARE INSTITUTIONS	35
XI. COMMUNICATIONS AND TRANSPORT	40
XII. PUBLIC WORKS	47
XIII. JUSTICE, POLICE, AND PRISONS	51
XIV. LEGISLATION	55
XV. BANKING, CURRENCY, AND WEIGHTS AND MEASURES	57
XVI. PUBLIC FINANCE AND TAXATION	57
XVII. MISCELLANEOUS	59
APPENDIX. GOVERNMENT PUBLICATIONS	62
MAP	

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## I.—GEOGRAPHY, CLIMATE AND HISTORY.

### Geography.

The Nyasaland Protectorate consists of a strip of land some 520 miles in length and varying from 50 to 100 miles in width, bounded on the east by Lake Nyasa, on the south by Portuguese East Africa, on the west by North-Eastern Rhodesia and on the north by the Tanganyika Territory. It lies approximately between  $9^{\circ} 45'$  and  $17^{\circ} 16'$  south latitude and  $33^{\circ}$  and  $36^{\circ}$  east longitude and is roughly 37,000 square miles in area, or nearly three-quarters the area of England. Its most southerly portion is approximately 130 miles from the sea.

The Protectorate falls naturally into two divisions consisting of:—

(1) the western shore of Lake Nyasa, with the high table-lands separating it from the basin of the Luangwa River in Northern Rhodesia, and

(2) the region between the watershed of the Zambezi River and the Shire River on the west, and the Lakes Chiuta and Chilwa and the Ruo River, an affluent of the Shire, on the east, including the mountain systems of the Shire Highlands and Mlanje and a small portion, also mountainous, of the south-eastern coast of Lake Nyasa.

Lake Nyasa, the third largest lake in Africa, is a deep trough 360 miles long and from 10 to 15 miles wide, lying at an altitude of 1,555 feet above the sea. Its greatest depth is 386 fathoms.

The only river of any importance in Nyasaland is the Shire, which issues from the south end of the lake and flows in a generally southerly direction for a distance of 250 miles until it joins the Zambesi. The Shire river takes the overflow from the lake, and during the rains is navigable in its lower portion, from the Zambesi to Chiromo.

The chief towns are Blantyre, with about 250 European inhabitants; Limbe, near Blantyre; and Zomba, the seat of the Government.

### **Climate.**

Climatic conditions in Nyasaland are, generally speaking, similar to those in other East African territories.

A marked contrast exists between the comparatively equable and healthy climate of the highlands, where at an altitude of 3,000 feet or more extreme heat is rarely experienced, and the heat of the Shire valley, where temperatures rising to 115° Fahrenheit are recorded in October and November. The lake shore also possesses its own climate; the temperature seldom rises above 100°, but the proximity of the lake and a generally heavy rainfall create a humid atmosphere which is particularly trying. The monsoon begins to blow strongly in September in conjunction with the sun's increase in southern declination and the first rains may be expected at any time after mid-October. From their beginning to the end of December it is usual to experience violent thunderstorms and heavy precipitations in a few hours, followed by an interval varying from one to fifteen or twenty days of considerable heat. With the return of the sun from its southern limit of declination the thunderstorms diminish in intensity and frequency and are replaced by a steady rain—January, February and March being usually the wettest months as regards both the duration and

also the actual amount of rainfall. After March the frequency and intensity of the rainfall diminishes rapidly, and from May to September the climate is comparatively cool and dry.

### History.

Very little is known of the history of the region now called Nyasaland before the middle of the past century. Jasper Bocarro, a Portuguese, is said to have been the first European to visit Nyasaland. He appears to have travelled, early in the 17th century, from the Zambesi to the confluence of the Ruo and Shire Rivers and thence via the Shire Highlands and the Lujenda River to the coast at Mikandani.

The modern history of Nyasaland begins with the advent of Dr. Livingstone, who, after experiencing considerable difficulty in ascending the River Shire, discovered Lakes Chilwa and Pamalombe, and on the 16th of September, 1859, reached the southern shore of Lake Nyasa. Livingstone was closely followed by a Mission under Bishop Mackenzie, sent out by the Universities of Oxford and Cambridge. The Mission settled in the Shire Highlands; but on account of the loss of many of its members by sickness and other causes, it withdrew in 1862. It was re-established in 1881 on Lake Nyasa, with headquarters on the island of Likoma, where it still remains.

In 1874 the Livingstonia Mission, named in honour of the great explorer, was founded by the Free Church of Scotland, and sent out its first party to Nyasaland in the following year. They were joined in 1876 by the pioneers of the Church of Scotland Mission, who chose the site of the present town of Blantyre and established themselves in the Shire Highlands, while the Free Church applied itself to the evangelization of the inhabitants of the shores of Lake Nyasa.

The Missions were followed by the African Lakes Corporation, and in 1883, Captain Foote, R.N., was appointed first British Consul, resident at Blantyre, for the territories north of the Zambezi.

A serious danger had arisen in connection with Arab slave traders who had settled at the north end of Lake Nyasa. At the time of Livingstone's first visit he found the Arabs established in a few places on what is now the Portuguese shore of the Lake, and at Kota Kota on the western side. Arab caravans, trading with the tribes in and beyond the valley of the Luangwa, were in the habit of crossing the Lake on their way to and from the sea coast. The opposition of the newcomers to the slave trade carried on by coastal Arabs and natives alike resulted in a conflict both with the Arab traders who had settled at the north end of Lake Nyasa under Mlozi and also with the Yao Chiefs under their influence.

In the summer of 1889, Mr. Johnston (afterwards Sir H. H. Johnston, G.C.M.G., K.C.B.), arrived at Mozambique as His Britannic Majesty's Consul and proceeded to travel in the interior to enquire into the trouble with the Arabs.

After treaties had been concluded with the remaining Makololo Chiefs and with the Yaos around Blantyre, Mr. Johnston proceeded up Lake Nyasa, leaving in charge Mr. John Buchanan, Acting Consul. This officer, after receiving news of a conflict between a well-armed Portuguese expedition commanded by Major Serpa Pinto and Mlauri, a powerful Makololo Chief on the Lower Shire, proclaimed a British Protectorate over the Shire province on the 21st of September, 1889.

In 1891, an Anglo-Portuguese Convention ratified the work of Mr. Johnston, Mr. Sharpe (later Sir A. Sharpe, K.C.M.G., C.B.), and other pioneers of British Central Africa; and in the following spring a British Protectorate was proclaimed over the countries adjoining Lake Nyasa. The Protectorate of Nyasaland, under the administration of a Commissioner, was confined to the regions adjoining the Shire and Lake Nyasa, the remainder of the territory under British influence north of the Zambesi being placed, subject to certain conditions, under the British South Africa Company.

On the 22nd of February, 1893, the name of the Protectorate was changed to "The British Central Africa Protectorate"; but the old name "Nyasaland Protectorate" was revived in October, 1907, by the Order-in-Council which amended the Constitution.

## II.—GOVERNMENT.

### The Central Government.

The Protectorate is administered by the Governor, assisted by an Executive Council composed by the Chief Secretary, the Treasurer and the Attorney-General *ex-officio* and, at present, the Senior Provincial Commissioner. The laws of the Protectorate are made by the Governor with the advice and consent of the Legislative Council constituted by the Nyasaland Order-in-Council, 1907. The Legislative Council consists of the Governor, four official members including the three *ex-officio* members of the Executive Council, and four unofficial members. The unofficial members, who are nominated by the Governor without regard to any specific representation, are selected as being those most likely to be of assistance to him in the discharge of his responsibilities, and hold office for a period of three years. In addition to indirect representation by at least one of the unofficial members, who for many years has been selected from one of the Missionary Societies, native interests are the direct concern of the Senior Provincial Commissioner, the Chief Secretary and the Governor himself.

### Departments of Government.

The principal departments of Government whose headquarters are in Zomba are those dealing with Finance, Legal Affairs, Medical and Sanitary Services, Agriculture, Public Works, Education, Police, Prisons and Lunatic Asylum, Geological Survey, Veterinary Services, Forests, Mechanical Transport and Posts and Telegraphs. The High Court and the Lands Office, which latter includes Surveys and Mines, are in Blantyre; and the headquarters of the Customs Department is at Limbe.

### Provincial Administration.

For administrative purposes the Protectorate is divided into two provinces, each in charge of a Provincial Commissioner who is responsible to the Governor for the administration of his province. The provinces are divided into districts in charge of District Commissioners, who are responsible to the Provincial Commissioner. The provinces of the Protectorate are as follows:—

<i>Province.</i>	<i>Comprising Districts.</i>	<i>Land area. Square miles.</i>	<i>Population.</i>	<i>Head-quarters.</i>
Southern	Lower Shire, Chikwawa, Central Shire, Cholo, Mlanje, Blantyre, Chiradzulu, Zomba, Upper Shire, South Nyasa.	12,114	791,111	Blantyre
Northern	Ncheu, Dedza, Fort Manning, Lilongwe, Dowa, Kota Kota, Kasungu, Mzimba, West Nyasa, North Nyasa.	25,260	831,815	Lilongwe

In 1933 a system of native local self-government was introduced: and a certain amount of administrative and judicial work is now delegated to those native chiefs who are legally constituted Native Authorities. These Authorities work in co-operation with the Provincial and District administration and are concerned primarily with purely native affairs.

### III.—POPULATION.

Nyasaland has a population of 1,894 Europeans, 1,631 Asiatics, and 1,635,804 natives, divided between the two Provinces in the following proportions:—

	<i>Europeans.</i>		<i>Asiatics.</i>		<i>Natives.</i>	
	<i>Males.</i>	<i>Females.</i>	<i>Males.</i>	<i>Females.</i>	<i>Males.</i>	<i>Females.</i>
Northern Province	279	184	222	42	370,237	420,557
Southern Province	847	584	1,077	294	388,475	456,535

The following table records the births and deaths of Europeans and Asiatics during the past three years:—

	1935.		1936.		1937.	
	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.
Europeans	... 44	11	35	18	29	18
Asiatics	... 63	16	71	18	83	19

Although Europeans are resident in every district of the Protectorate, 76 per cent of the European population is contained in the following five districts:—

Blantyre	...	...	...	...	681
Zomba	...	...	...	...	251
Cholo	...	...	...	...	184
Mlanje	...	...	...	...	170
Lilongwe	...	...	...	...	162

The native population is also very unevenly distributed. For instance, in the Southern Province the number of persons to the square mile varies from 557 on fertile land near the townships to 13·9 in the more arid areas of the Shire Valley.

*Marriages.*—Eleven marriages were registered under the British Central Africa Marriage Ordinance No. 3 of 1902, as against eight in the preceding year.

Under the Native Marriage (Christian Rites) Registration Ordinance, 1923, 3,762 marriages were celebrated, compared with 3,467 in the preceding year.

#### IV.—HEALTH.

The medical staff consists of a Director of Medical Services, a Senior Health Officer, a Senior Medical Officer, a Pathologist, a Medical Entomologist and 14 Medical Officers. The nursing personnel comprises a Matron and 10 Nursing Sisters.

In addition to the European Officers there are nine Asiatic Sub-Assistant Surgeons, 17 African Hospital Assistants and 200 African Dispensers.

Two European Sanitary Superintendents, 19 African Sanitary Inspectors, 36 Vaccinators and a varying number of sanitary labourers are employed chiefly in the townships of Zomba, Blantyre and Limbe.

#### The European Community.

The majority of Europeans live in the healthy highlands; and this fact, the general conditions of life, and the precautions which every intelligent person normally takes in the tropics, combine to produce a healthy European community.

Medical attention to Europeans, and hospital accommodation for them are provided chiefly by Government, but in part also by some of the Missions whose staffs include doctors who practise privately. There are Government hospitals at Zomba

and Blantyre which admit both official and non-official Europeans, the patients at Blantyre being chiefly non-officials.

Hospital admissions during 1937 numbered 223, of which 92 were at Zomba and 131 at Blantyre. The most frequent causes of admission were malaria 26, amoebic dysentery 31, appendicitis 16, and confinements 11. Out-patients numbered 529 at Zomba and 287 at Blantyre.

### The Asiatic Community.

Government subsidizes a ward for the treatment of Asiatics at the Church of Scotland Mission, Blantyre, and in most of the native hospitals throughout the country it is possible to provide some accommodation for Asiatics.

The Asiatic community has also contributed towards the cost of accommodation of their nationals at other Mission hospitals in the Protectorate.

### The African Community.

There are 15 native hospitals in the country; one of 100 beds, six of 50 and eight of 30. Three of the larger dispensaries have attached to them small wards to which in-patients are admitted. The total number of cases treated at the hospitals and main dispensaries during 1937 was:—

New in-patients	...	...	10,127
Out-patients	...	...	426,582

In addition to the hospitals there are 94 dispensaries distributed throughout the country, inclusive of those with wards attached. Most of them are well constructed buildings of brick and iron, but there are still a number of temporary wattle-and-daub buildings. Additional dispensaries are badly needed in some districts. Temporary dispensaries are customarily provided at the sites of road or bridge construction camps, when large numbers of labourers are employed at a distance from medical centres. The dispensers concerned supervise the sanitation of the labour camp, provide treatment for minor conditions, and render first aid to cases of a serious nature.

The rural dispensaries treated 302,318 new cases during 1937, 189,717 being males, and 112,601 females.

The total number of cases treated at Government hospitals and dispensaries together is considerable; but roughly 70 per cent. of this total is dealt with at the dispensaries, which treat only minor ailments. The majority of natives suffer from either schistosomiasis, ankylostomiasis, or malaria, and sometimes from all three, but comparatively seldom receive any in-patient treatment because the hospital of any particular district serves for the most part the population in its immediate vicinity only, and the rural dispensers have insufficient knowledge either to diagnose or properly to treat these complaints.

Though the standard of knowledge and ability of the rural dispensers is slowly improving, efficient diagnosis and treatment of the three diseases named can alone have but little effect on their incidence. It is education in the elements of hygiene and sanitation, not doses of medicine that is the native's urgent need.

Recent developments in medical treatment have had a definite influence in raising the sanitary standard of some of the rural areas. Amongst these may be mentioned:—

(a) Medical surveys. The medical officer is brought into closer contact with village life, and by the actual examination of the inhabitants obtains a knowledge of the cause of morbidity in the district.

(b) Medical inspection of school children. During the year 731 children were examined as compared with 598 in 1936. Owing to lack of staff it is not possible to extend inspection to day schools and only a few of the native boarding schools are included in the scheme.

(c) Inspections of labour conditions on private estates. These are carried out with the consent and co-operation of employers; and, where the advice of the inspection officers has been accepted, conditions have improved.

There are encouraging signs that Native Authorities are taking a real and effective interest in village sanitation. Many of them have made great improvements in the villages under their control, and welcome the efforts that are being made to instruct the villagers in the elements of hygiene.

### **Venereal Diseases.**

Venereal disease is not prevalent in Nyasaland, though cases are reported from time to time from all parts of the country. It is perhaps commonest in the neighbourhood of the townships, and in the northern districts from which most of the emigrant labour is derived. The Public Health Ordinance includes clauses providing for the compulsory treatment of venereal disease; but they are of little practical value, for on the one hand the penalties can seldom be enforced, and on the other a large majority of the reported cases are those who have voluntarily submitted to treatment.

The natives have their own so-called cures, and are averse to the long-continued attendance at hospitals which is inseparable from European treatment. The medical department relies on propaganda and instruction by means of pamphlets and lectures to bring to the natives a realization of the serious nature of venereal disease.

Special venereal disease clinics have been inaugurated, and most of the hospitals have one special ward for the accommodation of venereal cases.

### **Woman and Child Welfare.**

The chief hindrance to progress in this work is lack of education amongst the women. This results in primitive obstetrics and barbarous methods of infant-feeding, and it creates great difficulty in teaching the women any other methods. For the most part it is only the older married women and widows who are prepared to undertake a course in obstetrics and child-welfare work; and it is of course the older women who are in general the least educable. Native custom prohibits unmarried women from receiving instruction in obstetrics or attending maternity cases.

Government has recently instituted a register of native midwives, and issues certificates of proficiency. A syllabus of training has been prepared, and the Church of Scotland Mission at Blantyre has already produced a number of competent native midwives.

### **Mission Medical Work.**

The Missions have between them 26 hospitals at which general medical work is carried on. These are chiefly concerned with the treatment of leprosy and with woman and child-welfare work, for both of which they receive subsidies from the Government. The Church of Scotland Mission at Blantyre provides a course of training for African hospital assistants, and the majority of assistants in Government employ are obtained from this source.

### **Lunacy.**

There is one lunatic asylum in the Protectorate, situated at Zomba. The European staff consists of one Superintendent and one Deputy-Superintendent. These officers also hold appointments in the Prisons Department. The African staff includes both male and female attendants. The Chief Inspector of Prisons is also Chief Inspector of the Asylum.

There is accommodation for one European, one Asiatic and 87 African males. The African male accommodation consists of 58 single cells and one association ward capable of holding six inmates. In addition there are an observation ward with nine single rooms, a hospital for 13 patients, and a reception room where one patient can be temporarily accommodated. The female section, which is entirely separate, has 20 single rooms.

During 1937 there were 15 new admissions comprising one European male, 11 African males and three African females as against one European female, one Asiatic male, 10 African males and two African females (a total of 14) in 1936.

One European male and one European female were transferred to another Asylum outside the Protectorate. Ten African males and two African females were discharged.

Two African males died during the year from congenital idiocy and debility.

At the end of 1937 there remained in the Asylum 78 African males and 18 African females. The daily average population was 0·15 European male, 0·12 European female, 79·68 African males and 16·69 African females, making a total average of 96·64 as compared with 94·20 in the previous year.

The health of the inmates was very good, considering the crowded state of the asylum. The daily average number in hospital was only 5·14. Whenever possible, inmates were weighed monthly; 59·37 per cent. gained, while 30·21 lost weight.

Inmates who are able to work are given every encouragement to do so within the precincts of the Asylum. The value of the labour performed during the year, with that of produce from gardens and plantations, amounted to £97 17s. 6d.

Members of the staff of the Church of Scotland Missions at Zomba and Domasi held services for male inmates, and a few instructional talks were given to female inmates.

In addition to the Central Asylum at Zomba, lunatics are from time to time admitted to district prisons for safe custody pending certification. During 1937 eight criminal and fifteen non-criminal alleged lunatics were so detained. Of these seven criminal and two non-criminal were duly certified and transferred to the Central Asylum, while one criminal and twelve non-criminal were released. There were three lunatics awaiting certification at the end of the year.

	<i>Criminal or "Detained during the Governor's pleasure" Lunatics.</i>			<i>Non-Criminal or Alleged Lunatics.</i>		
	<i>Male.</i>	<i>Female.</i>	<i>Total.</i>	<i>Male.</i>	<i>Female.</i>	<i>Total.</i>
Remaining on 31.12.36	1	—	1	1	1	2
Admitted during 1937	8	—	8	14	1	15
Transferred to Criminal Lunatic Asylum.	7	—	7	1	1	2
Released during 1937...	1	—	1	12	—	12
Remaining on 31.12.37	1	—	1	2	1	3

## V.—SANITATION AND HOUSING.

Sanitation in Nyasaland is still primitive although, owing to generous grants from the Colonial Development Fund, conditions in the European townships have greatly improved of recent years.

The year 1934 saw the inception, in Zomba, of a scheme for housing native domestic servants in a special village on the borders of the township. Previously it had been the custom for domestic servants with their families to live in the compounds of their employers, with the result that it was not uncommon to find as many as 12 native men, women and children living in one small compound. The consequent difficulties of sanitary control, and the risk of conveyance to Europeans of diseases such as malaria and dysentery can readily be appreciated. Owing to lack of money the scheme is still very far from being complete; but more houses are being built every year, and it is hoped eventually to have a village of well-constructed brick huts, with a piped water supply, electric light, and provision for recreation.

The Town Councils of Blantyre and Limbe are establishing similar villages for natives employed within the townships.

Sanitation in the rural areas is a major problem. Owing to the ignorance and poverty of the natives, and to lack of supervisory sanitary staff, compulsory legislation is of comparatively little assistance; indeed as a rule compulsion does more harm than good. Such compulsory measures as are used are exercised chiefly by the Native Authorities, who are encouraged to promulgate simple sanitary orders which the villagers are expected to obey. All natives appreciate the value of a good water supply, though it is possibly the availability and quantity rather than the quality of it which interest them, and several chiefs and headmen are now developing their wells and springs, and protecting them from pollution. The construction of latrines is regarded on the whole as a necessary concession to European prejudices; but in spite of this widespread apathy, very many villages have installed latrines, which are actually used.

The improvement of general housing conditions is a matter requiring considerable propaganda, and progress is necessarily slow; nevertheless most of the chiefs and many of the better educated natives have erected quite well-built and in some cases attractive cottages, which serve to stimulate healthy emulation amongst their fellows.

## VI.—NATURAL RESOURCES.

### Agriculture.

#### WEATHER CONDITIONS.

Weather conditions during the 1936-7 season were on the whole satisfactory, and in consequence yields of most of the principal crops showed an improvement over the previous year. This is reflected in the values of exports given in the second table.

The rainfall figures for the six wet and six dry months of the 1936-7 season were as follows:—

Stations.	Zone.	Total rainfall	Total rainfall	Normal for six dry months.
		1 Nov., 1936, to 30 April, 1937.	Normal for six wet months.	
		Inches.	Inches.	
Port Herald	A	16·43	29·1	2·28
Port Herald Experimental Station.		29·32	28·8	2·54
Chikwawa	...	16·47	29·7	3·62
Cholo	...	40·62	48·8	10·39
Makwasa	...	43·47	46·8	11·02
Nsikisi	...	45·51	—	—
Lipumulo	...	38·90	—	5·37
Mikundi	...	38·91	—	9·27
Upper Mboma	...	40·59	—	11·03
Masambanjati	...	50·11	—	12·53
Mlanje	...	68·99	66·6	10·02
Chitakali	...	81·74	65·5	15·98
Thornwood	...	66·30	67·8	11·79
Ruo	...	50·38	53·7	10·41
Glenorchy	...	60·55	56·2	10·70
Sayama	...	53·38	56·0	·45
Lujeri	...	75·82	76·3	19·56
Chisambo	...	72·33	—	14·87
Nalipiri	...	61·04	51·9	11·94
Blantyre	...	52·18	39·9	2·67
Limbe Catholic Mission.		46·29	—	6·03
Chingaluwe	...	34·36	42·8	4·70
Nyambadwe	...	44·00	39·0	1·41
Chiradzulu Boma	...	42·73	40·0	2·33
Nyungwe	...	38·42	—	·05
Michiru	...	26·24	35·3	—
Namalanga	...	30·65	29·9	3·41
Nasonia	...	36·83	36·9	4·24
Zomba Experimental Station.		43·68	46·8	4·19
Zomba Plateau	...	59·26	—	7·30
Likwenu	...	48·30	—	2·43
Police Headquarters		42·15	41·9	3·84
Domasi	...	67·36	52·7	1·29
Nankunda	...	41·34	—	3·55
Malosa	...	45·90	—	1·47
Mbidi	...	25·81	35·8	—
Makwapala Experimental Station.		27·77	34·0	·56
Mwanza	...	K	30·58	3·45
Liwonde	...	L	22·93	1·04
Bilila	...		—	·7
Mandimba	...	M	26·72	—
Namwera	...		35·52	·96
Chipunga	...		38·98	·3
Fort Johnston	...	N	24·09	1·46
Monkey Bay	...		26·80	·80
Malindi	...		17·12	·9

			Total rainfall 1 Nov., 1936, to 30 April, 1937.	Normal for six wet months.	Total rainfall 1 May to 31 Oct., 1937.	Normal for six dry months.
	Zone.	Inches.	Inches.	Inches.	Inches.	Inches.
Golomoti	...	...	—	29·5	—	·1
Ncheu	...	P	38·98	37·0	·43	·9
Likuni	...	S	30·28	32·9	1·70	1·5
Chimvua	...		27·18	—	·55	—
Lilongwe	...		28·57	32·7	1·68	·8
Nathenje	...		37·69	—	1·58	—
Mpali	...	T	27·85	—	—	—
Dowa	...		32·00	33·1	1·37	·7
Fort Manning	...		31·96	39·8	·92	2·5
Domira Bay	...	U	32·60	31·0	·48	·1
Dedza	...	V	40·89	39·7	·43	2·2
Kasungu	...	X	41·51	29·1	·64	·3
Mzimba	...		29·36	31·7	·56	·2
Kota Kota	...	Y	50·46	48·2	·61	2·0
Chinteché	...	Z	44·48	62·9	5·59	5·1
Livingstonia	...		73·01	57·5	4·26	6·2
Karonga	...		42·24	52·3	4·73	2·8
Salima	...		46·05	—	·30	—
Glengary	...		38·92	—	9·70	—

A résumé of weather conditions in areas growing tobacco, the most important economic crop in Nyasaland, is given below.

#### ECONOMIC CONDITIONS.

The amounts and local values of agricultural exports for 1937 are set out below, and the figures for 1936 are given for comparison.

		1936.		1937.	
		Amount.	Value. £	Amount.	Value. £
Chillies and capsicums	lb.	12,119	151	3,077	38
Coffee ...	cwt.	336·6	628	908	2,051
Maize and maize flour	lb.	1,203,513	1,345	1,171,005	1,307
Rice ...	"	—	—	1,235	6
Tobacco :—					
Dark-fired ...	"	11,001,797	320,885	11,398,110	332,445
Flue-cured ...	"	1,608,079	46,903	1,876,905	54,743
Air-cured ...	"	781,665	22,799	1,261,918	36,806
Tea ...	"	7,706,088	256,870	8,816,788	326,038
Cotton (lint) ...	tons	2,375	133,007	2,066	105,722
Potatoes ...	lb.	83,279	335	39,588	159
Beeswax ...	"	25,983	1,083	35,805	1,492
Cotton seed ...	tons	1,678·7	3,357	895	2,440
Fibre ...	lb.	936,969	3,346	1,968,345	12,900
Rubber ...	"	206,535	861	203,175	3,449
Groundnuts ...	tons	—	—	—	—
Strophanthus ...	lb.	16,191	1,619	24,674	2,467
Soya beans ...	"	560,000	1,250	—	—

The most notable increases in exports during 1937 were in tobacco (dark-fired, flue-cured and air-cured), tea and fibre.

The increase in tobacco production was due both to favourable weather conditions and also to an increase in the number of growers. Registrations of native growers rose by 36.6 per cent. in the Northern Province and 19.6 per cent. in the Southern Province; but the acreage cultivated by each grower was somewhat reduced in order to prevent excessive production with a consequent fall in price.

The improvement in the case of tea was due to the facts that increased acreages came into full production and that yields were satisfactory.

The increase in exports of fibres is accounted for by the improved prices obtained for sisal; these encouraged production on estates that had previously been closed.

Cotton again failed to come up to expectations, the main cause being damage by insects. Red bollworm accounted for a very considerable loss of crop, and stainers also reduced the quality of much of the cotton. Prices for tobacco were somewhat lower than the previous season but, in the case of native produce at any rate, could not be considered unsatisfactory.

### LOCUSTS.

The red locust (*Nomadacris Septemfasciata*, Serv.) continued to be the only species occurring in the Protectorate during the year. For the second year in succession breeding and oviposition (10th generation) and development of new swarms (11th generation) was confined to the southern half of the Protectorate. The country north of latitude 13° S. was only invaded by occasional flying swarms of the new generation.

Hopper bands were mainly concentrated in the full length of the Shire river valley, along the Bwanje valley and the south and western lake shore belt, extending into the southern half of the Kota Kota district where a certain amount of damage to crops occurred. Elsewhere damage was generally slight; and though the sparsely inhabited north-west section of the Chikwawa district (in which several large bands were poisoned) was more heavily infested than in the previous year, an unusual feature was the absence of hopper bands in the vicinity of Port Herald.

New flying swarms developed in March and April; and the normal movement from lower to higher elevations, which occurred during May, was followed by north and north-west direction of flight, though circling flights were also prevalent in the Shire Highlands throughout the middle of the year.

By November the breeding colouration had appeared in several swarms, nearly all of which were confined to the southern part of the Protectorate. A slight indication of southerly movement was noticed during this month, but it seemed to be no more than the normal pre-breeding flight to the lower

elevations. Nevertheless an almost complete disappearance of swarms had taken place by the beginning of December, when only some half-dozen swarms were reported throughout the whole country.

No egg-laying appeared to occur until as late as 30th December, when a small swarm oviposited on an inconsiderable scale near the international border to the south of Port Herald. Apart from a few scattered, week-old hoppers found late in the eastern part of the Upper Shire district, the area just mentioned was the only one in which anything in the nature of hopper bands developed; and these bands were so insignificant that they were easily and rapidly destroyed.

Particular enquiry brought to light no information or evidence of adult swarms having died of disease, or after oviposition; and the absence of hopper bands until the close of the year shows that the breeding swarms must have completely left the country during November, without their movement being particularly noticeable.

During the year little general damage was done to crops by locusts. In January some food crops were destroyed in the Blantyre district by adults of the tenth generation; and in August wheat in the Dedza district was eaten by adults of the eleventh generation.

Hoppers did some damage to cotton and food-crops in the Chiromo and north-west Chikwawa sections of the Lower River districts, and in the Upper Shire and Kota Kota districts, but losses were not serious.

#### ADVISORY BODIES AND POLICY.

The Board of Agriculture did not meet during the year.

The Native Welfare Committee continued to advise Government on the co-ordination of the policies of the departments mainly responsible for native development, and on matters generally affecting native welfare.

The Agricultural Department and the Native Tobacco Board continued the experimental and investigational work in progress on the stations at Zomba, Lilongwe and elsewhere. The results of these experiments are conveyed to cultivators through the Agricultural Officers and Supervisors and their native staffs. The main efforts of these officers have been concentrated on attempts to induce cultivators to take measures to prevent the waste of their chief asset, the soil. Anti-erosion measures, of which the foremost are contour ridging and the use of compost, have been pressed on the native as far as staff permitted; and in the tobacco areas in particular there is a dawning realization on the part of the African that all is not well

with the land, and that the measures advocated are effective. An increasing number of gardens are now contour ridged and the crops are grown in ridges instead of the traditional "matuta," i.e., isolated, small hillocks. Many tobacco growers are making use of compost, but much remains to be done in this direction. Attention was also given to the improvement of cultivation generally and the use of a rotation, but there is still too great a tendency to consider the cash crop, be it tobacco or cotton, as something to be kept separate from food crops. Until there is a more general realization that all crops must be fitted into a general scheme of farming, and until full use is made of leguminous crops for the improvement of the soil, there will be no important improvement of yields.

Close touch was maintained with the specialists of the Empire Cotton Growing Corporation, at whose main station at Domira Bay are carried out strain trials and numerous other investigations concerned with the improvement of cotton. This work is invaluable.

The Agricultural Department also kept in close touch with the Jeanes School, at which lectures and demonstrations were frequently given by departmental officers. In addition to the course for Jeanes teachers, short courses for Native Authorities are now a regular function of the school. The opportunity thereby afforded for giving agricultural instruction, and the contacts formed by the Agricultural Department with those who will be leaders of native affairs in the districts in years to come, are of the greatest importance.

### TOBACCO.

Weather conditions both in the main Southern and Northern Province areas were generally conducive to good growth and ripening of the tobacco crop, and very good leaf of all types, in large yield, was obtained. Rainfall throughout the season was well distributed, with few very heavy localized falls. Temperatures, rainfall and humidity were especially favourable in the Northern Province during the mid-growing season and the main ripening period of March.

The total amounts of the different types exported were:—

	lb.
Dark-fired...      ...      ...	11,398,110
Flue-cured      ...      ...	1,876,905
Air-cured...      ...      ...	1,261,918

The average amounts produced per grower on Native Trust lands were 136 lb. in the Northern Province and 230 lb. in the Southern Province.

The amounts of dark tobacco purchased from growers on Native Trust lands and private estates are given in the following table:—

		<i>Northern Province.</i>	<i>Southern Province.</i>
		<i>lb.</i>	<i>lb.</i>
Native Trust Land ...	...	7,985,027	2,871,616
Private Estates ...	...	2,654,975	1,230,985
		—————	—————
Total		10,640,002	4,102,601

The total figure for the dark tobacco crop was thus 14,742,603 lb. The corresponding figure for 1936 was 13,821,718 lb.

At the end of 1937, stocks of Nyasaland tobacco in the United Kingdom stood at 31,459,002 lb., a  $2\frac{1}{2}$  years' supply on the usual basis. Consumption of Nyasaland tobacco during 1937 amounted to 12,523,176 lb., an increase of 72,915 lb. on that of the previous year and representing 26.8 per cent. of all Empire tobacco consumed. The latter figure compares with 26 per cent. for 1936.

#### COTTON.

The 1937 season was even more disappointing than that of 1936, which was itself a bad year. The production of seed cotton on Native Trust land amounted to 5,745 tons which, with the 846 tons produced on private estates, gave a total production of 6,591 tons. This is a decrease of over 9 per cent. on the previous year's figures. There was a considerable drop in production in the main cotton growing areas of the Lower River, where 3,002 tons only were produced as against 4,653 tons in the previous year; while production increased in the central part of the Southern Province, where 857 tons were obtained against 657 in 1936, and in the southern part of the Northern Province, where 1,659 tons were produced as against 934 tons in the previous year.

Prices also were lower, averaging 1·039d. for No. 1 as against 1·428d. in 1936; .285d. for No. 2 against .926d.; and .225d. for No. 3 against .639d. in the previous year. The total sum paid to Native Trust land growers for cotton was £49,199, as against £75,451 in 1936. The percentage bought as No. 1 was, however, 83·91 per cent. as against 70·1 per cent. in 1936.

The improvement in the quality of the crop indicated by the above percentage was however more apparent than real, and was due in large measure to the fact that buyers, in competition to secure their requirements out of the small crop available, purchased as No. 1 a quantity of cotton which really

contained a good deal of No. 2. The same fact accounts for the comparatively large drop in the price paid for No. 2.

The comparative failure of the crop was due to a combination of causes of which the chief was the serious incidence of insect pests, notably red bollworm and stainer. The high incidence of these pests was due in no small measure to the efforts extending over the past few years to increase the crop in the Lower River area to its maximum. Another principal cause was the larger production of cotton in Portuguese East Africa, where the land utilized is contiguous for miles to Lower River areas and where, as there is no adequate "dead" season, cotton has been in growth throughout the year and ideal conditions have been created for the breeding of the red bollworm. So long as this pest is present in numbers at the beginning of the growing season and is able to start breeding on the first cotton of the new crops, neither better chosen dates of planting, better seed, nor better cultivation can produce full crops. Strenuous efforts were made to eliminate all crop residues by the end of October, and considerable success was obtained, but a certain amount of regeneration occurs from plants cut with a hoe, and the cleaning was not so complete as was desired. Some evidence has been brought forward pointing to the necessity of a complete "dead" season over a period exceeding two months, and the Empire Cotton Growing Corporation's staff have planned a comprehensive series of experiments to ascertain what should be the minimum "dead" period. Until the red bollworm is brought under a reasonable measure of control, which can only be achieved by an adequate and complete "dead" season, there appears to be little prospect of reaching the yields of which the existing land and seed are undoubtedly capable.

### TEA.

The tea industry continued to expand during the year under review, and it is in a flourishing condition. By the International Tea Restriction Scheme, to which Nyasaland is a party, the maximum area which might be planted during the first period of restriction was limited to 17,700 acres. The greater part of this area is already planted, and it is hoped that the Protectorate may secure additional acreage for some necessary expansion during the second restriction period commencing in March, 1938.

Production rose from 8,492,316 lbs. in 1936 to 14,466,592 lbs. in 1937, while exports rose from 7,706,088 lbs. to 8,816,788 lbs. valued at £326,038. The Agricultural Department maintains an experimental station at Mlanje, where the main problems affecting tea production are under investigation,

and experimental work in connexion with fertilisers, pruning, degrees of plucking, methods of controlling erosion, and the armillaria root disease were continued.

### NATIVE FOOD CROPS.

Maize, the main native food crop, yielded well in the central areas of the Southern Province but was less productive in the Lower River area owing to bad distribution of rainfall. In the southern areas of the Northern Province and adjacent districts of the Southern Province yields were moderate, while, generally speaking, in Northern districts yields were fair. Some loss of crop was occasioned in small areas by flooding, and the normal area under this and other food crops was somewhat reduced by the unusually high level of the lake.

Groundnuts and beans were produced in larger quantities, and rosette diseases caused less loss than in previous years. In the latter part of the year considerable stocks of groundnut seed were issued; and provided that growers retain seed stocks there should be no shortage of seed supplies in the future. There is however far too great a tendency to sell everything surplus to immediate needs, and to trust to luck for the provision of seed and food stocks later in the season. Machewere (*Pennisetum typhoideam*) and Mapira (*Sorghum Vulgare*) yielded well, though plantings of the latter have been considerably reduced of late years owing to its vulnerability to locust attack.

There was some increase in the soya bean crop, but this had not yet become popular as a food-stuff, and growers prefer to regard it as a cash crop.

There is room for considerable increase in the production of leguminous crops for food purposes, and when this can be brought about both the native diet and also agricultural practice will greatly benefit. There was some increase in the rice crop along the Lake Shore, and the proportion of Faya rice, which is well suited to local conditions, was higher than in 1936.

### OTHER CROPS.

On sisal estates, which reopened in 1936, cutting was continued, and exports increased from 936,967 lbs., valued at £3,346, in 1936 to 1,968,345 lbs., valued at £12,900, in 1937.

The European acreage under Tung oil plantings increased from 624 acres in 1936 to 1,677 acres in 1937. The bulk of plantings have been of *Aleurites montana*, which in most areas is much easier to establish and grows more rapidly than *A. fordii*. A number of the trees are now coming into bearing, but the whole of their yield has been used as seed and crushing has not yet begun.

There was a further decrease in the area under coffee, from 837 acres in 1936 to 566 acres in 1937. The causes of this decline, noted in previous reports, are mainly the long dry season and the incidence of white stem borer.

## Forestry.

### GENERAL.

Owing to the facts that the rainfall of Nyasaland is of a markedly monsoon character with a long intervening dry season, and that so much of the land is hilly or undulating, the retention of forest or other natural vegetation assumes great importance, on account of its influence on the storage of the rainfall and on the prevention of serious erosion and floods. Under existing conditions of shifting cultivation and of incomplete control over land usage, protective forestry has essentially to take a very prominent place in forest policy.

Many different types of forest are to be found in the territory, ranging from very small dense evergreen mountain forests to open savannah and parklands on the plains. Most of the forests, however, are dry and open types, and a high proportion is composed of small trees of little commercial value except for supplying poles and fuel for local use. The territory's resources of commercial timber (i.e. trees of dimensions and quality suitable for conversion into sawn timber) are scanty. The total area of forest and good-class savannah is estimated to be less than 4,000 square miles, or some 10 per cent. of the land area of the territory.

### STATE FORESTS.

Forty-eight State forest reserves have been constituted, totalling 2,623 square miles. The majority are primarily protective, as they comprise main watersheds and catchment areas. All reserves are free from rights of user of any kind. A scheme of village communal forests has resulted in the reservation of 3,948 separate areas with a total acreage of 195,364. Provision has now been made for the constitution of Native Authority forests which, in status and objective, will be intermediate between State forest reserves and village forest areas, and may be either protective or commercial or a combination of both. Further reservation of forests will be guided by general investigations in the classification, economic usage, and co-ordinated planning of land resources. Machinery for securing co-ordination has now been set up by the appointment of an Agronomic Sub-Committee of the Native Welfare Committee, and of a Soil Erosion Officer who will act as liaison between departments. He will advise on various land problems which have received insufficient attention in the past.

During the year under review a forest reconnaissance was commenced in the North Nyasa district, where application of the Forest Ordinance has automatically followed a recent surrender to the Government of the land surface rights by the British South Africa Company. Minor forest reconnaissances were carried out in the Southern Province. The Soil Erosion Officer carried out investigations of rural conditions in certain regions in the southern half of the Protectorate which do not produce any quantity of economic crops for export, but which have large areas under foodstuffs or grazing.

The degree of intensity of management of the State forest reserves is governed entirely by local markets. In Mlanje district two mountain reserves which contain small patches of valuable coniferous forest (*Widdringtonia whytei*) are, although situated at some distance from markets, under comparatively intensive management. The whole output from these forests is converted to sawn timber under the agency of the Forestry Department. For well over 40 years these coniferous forests have supplied the entire requirements of Government in building timber, and sales of sawn timber to the public have considerably increased in recent years. In two other reserves, near Zomba and Limbe townships, planting schemes with conifers have been carried out for the production of major timber and there is now a steadily increasing output. Other State reserves, situated near townships, are under intensive management for firewood and pole production, and in some there is a certain amount of planting. An important feature of these reserves is the sale of firewood at very cheap rates to urban natives. Trees of value for commercial timber are very sparsely distributed in the remainder of the reserves, which are essentially protective. Many of them are remotely situated from markets and main lines of transport. Consequently until such time as local markets develop for their produce, they will remain under merely rudimentary management designed for general protection, for mitigating fire damage by controlled early burning, and for improving their growing stocks at a very low cost.

#### COMMUNAL FORESTS.

The village communal forests are under the control and management of village headmen for supplying village needs in forest produce. The areas are selected by the village headmen assisted by district native foresters, the principle of selection being to take land which is unsuited to agriculture, or which can best be spared. A high percentage of the areas are situated on hill slopes or in lands of poor economic value, and consist mainly of forest regrowth. The district native foresters also assist the headmen in demarcation of the areas, in recording particulars, and in general management; the last duty being a task which is rapidly growing and is taking up an increasing portion of the

foresters' time. During the year under review 325 new areas aggregating 16,037 acres were allocated and registered. Although the greater part of the forest produce used by the native population is at present obtained from undemarcated woodlands, the village forest areas are being increasingly relied upon as a source of supply, particularly in congested localities.

#### FOREST MANAGEMENT.

In addition to providing for the protection of State and communal forests, the forest laws deal with the control of cutting and cultivating on the banks of rivers and streams, and the protection of steep hill slopes and certain scheduled species of trees.

Forestry in some form is practised on almost all agricultural estates under European management, and at most Mission stations. In all Government leases there are afforestation covenants which provide for the retention of natural forest over a portion of the land, or for reafforestation by planting. The greatest needs of the settler community are for poles and firewood, and there is a general preference, wherever possible, for producing these from planted exotic species. The aggregate area of artificially established woodlands on estates is over 20,000 acres. Increasing attention is being given by estate holders to the management of their natural woodlands.

During the year under review there were substantial increases in sales of timber and firewood from forest reserves and undemarcated forest. A pleasing feature of this increase was a marked revival in some localities of the native sawing industry which is confined to the exploitation of mahogany (*Khaya nyasica*) scattered along stream banks, and of certain hardwoods in savannah forest. The average local consumption of sawn timber in recent years has been approximately 150,000 cubic feet per annum; about 15,000 of this is *Widdringtonia* timber derived from forest reserves. There is an increasing use of local wood in packing tobacco for export. The annual consumption of unsawn timber in the form of poles is estimated to be over  $2\frac{1}{2}$  million cubic feet, much of which is used by the native population in the building of their huts, which have to be renewed at least every two or three years. Firewood is the general fuel for domestic use, and considerable quantities are consumed in tobacco curing, brick making, lime burning, lake transport, and on the railway north of Blantyre. The annual consumption of firewood is estimated to be over 150 million cubic feet. Much wood is destroyed in the periodical reopening of land left under fallow.

The territory's resources of commercial or building timber, though scanty, are sufficient to meet a small increase over present local demands. Even if resources were greater, no

export trade in timber could be developed owing to high transport and freight costs. Imports of unmanufactured timber have remained at a low figure for many years, the value in 1936 being £2,974 and in 1937 £2,847. Imports of plywood tea chests have shown a somewhat rapid increase in recent years, the values for 1936 and 1937 being £16,440 and £17,377 respectively. There were increases in the export of both strophanthus and beeswax in 1937, the former having a value of £2,467 compared with £1,619 in 1936, and the latter a value of £1,492 compared with £1,083 in the previous year. With regard to the high consumption of wood by the large native population and the possibilities of better economic utilization, importance is attached to demonstrations which are being given in the preservative treatment of timber and poles with arsenical salts, as a protection against the ravages of termites, borers and fungi. Further progress was made during the year in the scheme for regulating, through the Native Authorities, the construction of dug-out canoes. District forest staffs assisted in further stock-takings of trees suitable for canoes, and various Native Authorities who fixed annual quotas for cutting these trees also made rules governing the construction of canoes.

Observations and experiments in silviculture were continued with particular regard to forest regeneration by natural means as well as by sowings and plantings. Attention was also paid to the technique necessary for the improvement of growing stocks in various types of forest. Other investigational work related to trials of exotic species of trees, time and degree of thinnings, pruning, rate of growth, seed germination tests, etc. The early success with introduced pines, following inoculation of soils with mycorrhiza, has justified a considerable extension in the trials of various pine species, and there now seems to be great promise of their becoming a valuable asset for local afforestation purposes, particularly for planting some of the poorer classes of land which can best be spared for forestry.

Satisfactory co-operation was maintained between the Forestry Department and the District Administration, and district forest staffs continued to work directly under the District Commissioners, with divisional forest officers in close liaison. The annual courses of instruction for African foresters were held as usual in both Provinces. A series of lectures on "Land Use in Nyasaland" was delivered by the Conservator of Forests at the Jeanes Training Centre, where a prominent place is given to training in rural reconstruction work.

The present forest policy is considered to be adequate for protecting and developing the forest resources of the country, provided there is reasonable progress in modifying native methods of agriculture and in arranging for a better economic use of the land. Under present conditions protective forestry is

of paramount importance, and far more time has of necessity to be devoted by the Forestry Department to this than to the purely productive aspect of its work.

### LIVESTOCK.

The year 1937 was somewhat unfortunate insomuch as outbreaks of disease in different areas seriously interfered with the livestock industries.

In March, East Coast fever was discovered in the southern quarantine camp at Chileka. Inquiries proved that the disease had been brought from Portuguese East Africa through the Central Shire district. Early diagnosis greatly assisted the eradication of the outbreak but unfortunately the main road from the Northern Province, along which cattle from Ncheu and Dedza are brought to the southern markets, was implicated, and had to be closed. After considerable delay it was possible to organize a railway service and to transport small consignments of cattle to the south. But the overhead charges for railway freight and the necessity of using a temporary abattoir outside Blantyre created a bad impression amongst cattle owners; and when, later in the year, the railway bridge over the Shire River was seriously damaged by floods, the trade died away completely.

In the North Nyasa district a widespread outbreak of trypanosomiasis made it necessary to forbid all movement of cattle. This order seriously interfered with the beef cattle trade with Tanganyika, which had held out so much promise in the previous year.

The increased interest in cattle shown by natives generally was, however, quite as noticeable as in 1936.

In the Mzimba district a demonstration farm was started with the object of proving the benefits to be derived from the better housing and feeding of cattle. Small plots were planted with foodstuffs, and compost pits and silos were made; and a series of lessons in milking and the management of calves, with demonstrations, were given. A dairy and a ghee-making shed were also erected. The farm was a great success, and many headmen sent in pupils from considerable distances. A small agricultural society was formed by the natives: this society held regular meetings and much intelligent interest was shown. Applications for the institution of similar farms were received from all over the area and also from other districts.

Considerably more hides were sold by natives than during the previous year, and reports from South Africa on the quality of these hides are promising. It is probable that demonstrations in flaying and sun-drying have been chiefly responsible for the improvement.

The native milk trade around the Southern Province townships improved considerably, and the Town Councils of Blantyre and Limbe have instituted measures for ensuring the cleanliness of milk. No opposition from the native vendors has been observed, and sales have advanced considerably.

A considerable number of horses was imported during the year, and generally speaking, all have done well. However, in spite of inoculations with vaccine obtained from Onderstepoort, South Africa, several cases of horse sickness occurred, some being fatal. Samples of blood were sent to Onderstepoort where it was discovered that a virus, not incorporated in the South African vaccine, exists in the horse sickness in Nyasaland. This virus, to be known as "*Blantyre Virus*" is now being cultivated and will be included in all vaccines manufactured in South Africa.

### Minerals.

The following minerals are known to occur in the Protectorate:—Gold, in small amount, in the Lisungwe Valley, Blantyre District; bauxite, in the Mlanje Mountains; iron-ores, ilmenite and rutile in the Port Herald hills; corundum and zircon at Tambani Hill, Central Shire District; asbestos, kyanite and iron-ore in Ncheu District; iron-manganese ore on Chilwa Island; graphite and mica in Dowa and Ncheu Districts; massive garnet in South Nyasa District; galena in Dowa District; coal in Lower Shire and North Nyasa Districts and cement materials at Lake Malombe and in North Nyasa District. Mica and graphite were worked during the European War and shortly afterwards, and gold is worked from time to time on a small scale. Inquiries as to the possibility of producing corundum kyanite were in progress at the end of 1937.

With the aid of grants from the Colonial Development Fund an investigation of the mineral resources of the country is in progress. During the year the staff examined parts of Upper Shire, South Nyasa and Ncheu Districts with special reference to garnet in South Nyasa District, and to the mica, kyanite, graphite and iron-ore of Ncheu District. A promising new occurrence of kyanite was recorded.

The British South Africa Company continued the geological and mineralogical examination of the areas over which it holds the mineral rights in Fort Manning, Lilongwe, Dedza, Dowa and Kota Kota Districts.

### Water Supply.

The activities of the Geological Survey Department were devoted in part during 1937 to the continued improvement and

extension of village water supplies with the aid of grants from the Colonial Development Fund.

By the end of 1937, 400 wells and bore-holes had been constructed, giving a minimum daily yield of 1,900,400 gallons and serving a population of at least 78,000 natives and non-natives. By their construction about 674 square miles of unoccupied or sparsely populated country have been opened up for further settlement.

These water supply activities, which it is proposed to continue until 1940, have been carried out mainly in the country served by the Railway and the Railway Northern Extension to Lake Nyasa. They have greatly stimulated agricultural production in the areas served and have thereby provided freights for the Railway, and have assisted in the economic development of the country. Moreover, by providing new land for native settlement they have relieved congestion in a number of overcrowded areas. Many wells and bore-holes have also been provided for native hospitals, dispensaries, markets and rest-houses.

## VII.—COMMERCE.

Nyasaland being primarily an agricultural country, the progress of trade is chiefly dependent upon the yields and market prices of its exportable products. These products, of which tobacco, tea, cotton and sisal are the most important, find their markets principally in Great Britain. Latterly, however, in the case of tobacco and cotton, there has been a marked increase in trade with other countries. Natives, mainly under European supervision, produce upwards of 85 per cent. of the tobacco (mostly fire-cured), and practically all the cotton. Adverse climatic conditions, aggravated by a material fall in prices, brought considerable disappointment to the growers of cotton; and this fall, together with the lower prices paid this year for tobacco, reduced by some £80,000 the spending power of that portion of the native population engaged in the cultivation of these crops.

Bazaar trade, however, instead of reacting to the adverse conditions, continued the upward trend experienced during the past few years. In explanation it may be assumed that the purchasing power derived this year from the harvesting of the two staple crops mentioned was augmented by reserves accumulated during more prolific and successful years, by the larger sums distributed for labour employed on the tea, sisal and other European estates, and by the monies brought into Nyasaland by labourers returning from the Rhodesias and the Union of South Africa.

The increase of import value over that of 1936, which amounts to £71,213 (11 per cent.), somewhat exaggerates the economic position and should not, therefore, be taken as indicating the year's rate of progress. In anticipation of better crop results traders imported larger quantities of goods than the retail market could eventually absorb. In consequence, unusually large stocks remained unsold at the end of the year.

European trade has definitely improved as a result of increased tobacco, tea and sisal production and more economic market prices, and its success is reflected in the increased importations of motor vehicles, agricultural implements, fertilizers, horses and breeding cattle. Of the 257 motor vehicles imported, 190 (73·9 per cent.) were of British manufacture.

An index to native progress is the increasing demand for bicycles. During the year 4,936 bicycles, valued at £14,569, were imported as against 3,233 in the preceding year and 1,379 in 1935. Ninety-seven per cent. were shipped from Great Britain. There were also substantial increases in imports of sewing machines, beads, lanterns, paraffin, soap, boots and shoes, cotton goods and artificial silk.

Cotton piece goods represent 24 per cent. of the Protectorate's import value. Japan secured 91·73 per cent. of the year's yardage imports, thus maintaining the position she held in 1936. Imports of these commodities from Great Britain, which amounted to 6·1 per cent. of the total quantity imported, fell by ·21 per cent. as a result of the temporary inability of home manufacturers to accept indents for the better quality piece goods now in greater demand.

Nyasaland being within the region covered by the Congo Basin Treaties, 1885, and the Convention of St. Germain-en-Laye, 1919, may not grant preferential rates of duty. Accordingly its customs tariff applies equally to imports from all nations.

Total value of imports, domestic exports and re-exports for the last five years:—

<i>Year.</i>	<i>Imports.</i>	<i>Domestic Exports.</i>	<i>Re-exports.</i>
1933	£ 629,245	£ 513,644	£ 21,612
1934	518,146	753,369	18,621
1935	628,499	736,312	18,512
1936	673,528	796,627	9,457
1937	746,575	887,058	14,867

Percentage of total value of imports (including Government) from the Empire and Foreign Countries and principal supplying countries for the last five years:—

Year.	<i>Percentage from the Empire.</i>	<i>Percentage from Foreign Countries.</i>	<i>Principal Supplying Countries.</i>	
			<i>Empire.</i>	<i>Foreign.</i>
1933 ...	63·0	37·0	United Kingdom (54·3), India, South Africa, Canada.	Japan (12·9), Germany, U.S.A.
1934 ...	55·7	44·3	United Kingdom (48·3), India, South Africa, Canada.	Japan (23·8).
1935 ...	50·6	49·4	United Kingdom (44·5), India, South Africa, Canada.	Japan (29·4), Germany, U.S.A.
1936 ...	53·3	46·7	United Kingdom (46·2), India, South Africa, Canada.	Japan (25·1), Germany, U.S.A.
1937 ...	48·9	51·1	United Kingdom (42·0), India, South Africa, Canada.	Japan (29·0), Germany, U.S.A.

Percentage of weight of domestic exports sent to the Empire and Foreign Countries and principal countries of destination for the last five years:—

Year.	<i>Percentage to the Empire.</i>	<i>Percentage to Foreign Countries.</i>	<i>Principal Countries of Destination.</i>	
			<i>Empire.</i>	<i>Foreign.</i>
1933 ...	97·4	2·6	United Kingdom (91·3).	S. Rhodesia, Belgium, Germany.
1934 ...	96·7	3·3	United Kingdom (92·8).	S. Rhodesia, Belgium.
1935 ...	94·6	5·4	United Kingdom (88·8).	S. Rhodesia, Belgium and Holland.
1936 ...	94·1	5·9	United Kingdom (92·3).	S. Rhodesia, Belgium and Germany.
1937 ...	93·7	6·3	United Kingdom (90·9).	S. Rhodesia, Belgium, Holland, Netherlands East Indies, Poland, Portugal.

Quantities and values of principal imports (including Government) for the years 1936 and 1937, indicating the principal sources of supply:—

Articles.	Unit of Quantity.	1936.		1937.		Principal sources. of supply.
		Quantity.	Value.	Quantity.	Value.	
Provisions, preserved, tinned or bottled, fruits, meat, fish, etc.	Cwt.	3,897	£ 13,156	3,887	£ 13,520	United Kingdom.
Spirits ... ...	Pf. and Imp. gallons.	6,508	10,022	6,596	10,142	United Kingdom.
Iron and steel manufacturers.	Cwt.	50,856	45,511	27,527	44,294	United Kingdom, Germany, Japan.
Machinery and implements.	Cwt.	20,633	57,168	13,271	45,795	United Kingdom, Germany, U.S.A.
Cotton piece goods...	Lin. yards.	10,706,823	142,430	11,091,891	173,985	United Kingdom, Japan, (91·7 per cent.), Germany.
Blankets ... ...	Number	122,228	10,882	89,024	8,373	Belgium, Japan.
Shirts and singlets...	Doz.	29,912	10,684	25,501	11,691	Japan.
Motor spirit ...	Gal.	507,659	37,939	551,196	41,902	Netherlands East Indies, U.S.A., Iran.
Vehicles and parts...	—	—	60,712	—	81,634	United Kingdom, Canada, U.S.A.
Fertilizers ... ...	Tons	1,980	20,626	2,255	21,662	United Kingdom, U.S.A., Holland.

Quantities and values of principal domestic exports and re-exports for the years 1936 and 1937:—

Articles.	Unit of Quantity.	1936.		1937.	
		Quantity.	Value.	Quantity.	Value.
(a) Domestic Exports :—			£		£
Maize and maize flour ... ...	lb.	1,203,513	1,345	1,171,005	1,307
Tobacco ... ...	"	13,391,541	390,587	14,536,933	423,994
Tea ... ...	"	7,706,088	256,870	8,816,788	326,038
Cotton ... ...	"	5,320,279	133,007	4,628,821	105,721
Cotton seed ... ...	"	3,760,328	3,357	2,004,734	2,439
Fibre (sisal) ... ...	"	936,969	3,346	1,968,354	12,900
(b) Re-exports :—					
Cotton manufactures ...	"	23,740	1,856	29,609	2,403
Iron manufactures ...	"	31,360	577	504,084	1,223
Vehicles and parts ...	"	9,786	1,026	19,158	1,631

Particulars of the imports and exports of coin for the last five years:—

Year.	Gold.	Silver.	Bronze and Nickel.	Total.
	£	£	£	£
(a) Imports :—				
1933 ... ...	—	96,009	—	96,009
1934 ... ...	—	1,398	—	1,398
1935 ... ...	—	26,446	1,800	28,246
1936 ... ...	—	116,211	4,350	120,561
1937 ... ...	—	115,242	1,650	116,892
(b) Exports :—				
1933 ... ...	66,904	12,243	39	79,256
1934 ... ...	10,870	4,350	18	15,238
1935 ... ...	3,356	11,582	4	14,942
1936 ... ...	1,960	9,622	3	11,595
1937 ... ...	1,118	13,585	37	14,740

### Customs.

Duties are imposed under the Customs Ordinance, 1906; and during 1937 they were distributed as follows:—

#### *Import Duty:—*

Table 1.—Specified duties on motor vehicles: matches, cement, wines and spirits, soap, ales, beers, tobacco, umbrellas, cotton piece goods, etc.

Table 2.—33 per cent. *ad valorem* on second-hand clothing and perfumed spirits.

Table 3.—28 per cent. on luxury articles e.g., firearms, jewellery, silks, etc.

Table 4.—13 per cent. *ad valorem* on necessities and articles of common use, e.g., provisions, etc.

Table 5.—20 per cent. *ad valorem* on articles not otherwise specifically charged under other Tables.

Table 6.—3 per cent. *ad valorem* on articles of an industrial nature, e.g., machinery, packing materials, etc.

### **Publicity and Tourist Traffic.**

The Publicity Committee is appointed by the Governor and consists of an official Director and eight voluntary unofficial members.

The sum normally voted for publicity purposes is £800 per annum, but this was reduced considerably during the year to meet outstanding accounts in connection with Nyasaland's participation in the Empire Exhibition at Johannesburg during 1936.

Copies of the revised edition of the brochure, *Nyasaland Calling*, which was printed for the Johannesburg Exhibition, were widely distributed, principally in the Union of South Africa and the Rhodesias. In addition to the supplies sent to the various tourist agencies, motoring associations, hotels, shipping companies, etc., many copies were issued to individual applicants from the above-mentioned countries.

A large number of enquiries and requests for other literature and maps was received and dealt with. Other activities of the Bureau during the year included the writing of illustrated articles for certain South African, Southern Rhodesian and Beira newspapers. Unfortunately, funds were not sufficient for Nyasaland to participate in the special issues of *The Times* and *Crown Colonist*.

The rest houses provided by Government at Kasungu, Njakwa, Mzimba and Fort Hill on the Great North Road proved very useful and have been much appreciated by visitors.

Lake Shore and up-country hotel accommodation in general is still capable of improvement, and the Committee are considering some attempt to ensure that all hotels conform to a certain standard.

Nyasaland roads still retain their good reputation, and their general condition and efficient sign-posting have constantly led to favourable comment.

The number of European visitors to Nyasaland during the last five years is as follows:—

1933	...	...	...	...	1,622
1934	...	...	...	...	1,537
1935	...	...	...	...	1,929
1936	...	...	...	...	1,624
1937	...	...	...	...	2,026

## VIII.—LABOUR.

Generally speaking, labour is plentiful; though in some areas, such as the extensively cultivated tea belt, a shortage of labour occurs at times in the plucking and curing seasons.

The 1937 population survey revealed that approximately 443,000 adult males were fit to work for wages; that about 90,000 of these were at work in other territories; and that approximately 173,000 of them were earning their own livelihood in the production of economic crops and other whole-time economic production and distribution. This leaves a balance of approximately 180,000 adult males to fulfil the estimated total internal labour requirements, which amount to approximately 60,000.

There are no mines in Nyasaland, and the internal labour is employed in agriculture, in tobacco, tea, cotton, sisal, soap and rubber factories, by commercial firms and railways, by Government departments, and as domestic servants.

European farmers employ practically no contract labour, and depend for their requirements either on resident native tenants or on casual labour. These employees work on a month-to-month basis, and 26 working days entitle them to a month's wages. The "ticket" system, whereby each native employee is issued with a ticket on the day he commences to work, and the 26 working days have to be completed within a total period of 42 days, is in almost universal use.

Employees of commercial firms, factories, railways and Government also work on the month-to-month basis, the definition of a month being "a calendar month" which, except in the case of contracts of service by domestic or personal servants, shall include 26 working days.

With regard to service outside the Protectorate, no restriction is placed on the able-bodied adult male who wishes to migrate, and such men are given Identification Certificates free on application when they wish to proceed abroad to seek work. Applications are occasionally received from farmers in Southern Rhodesia for permission to engage Nyasaland labourers for work: all such applications are considered by the Advisory Committee on the engagement of labour for work outside the Protectorate, and a report on the employer concerned is submitted by the Nyasaland Labour Officer stationed at Salisbury, Southern Rhodesia. If the application is approved, the employer or his European representative comes to Nyasaland to engage the native labourers authorized; and contracts of service, attested by a Magistrate, are drawn up and signed by each individual labourer and by the employer. Such contracts provide for free transport to and from work, agreed wages, deferred pay, family remittances, free housing, food, medical attention, etc., and all are for a maximum period of twelve months, which may be

extended by mutual agreement for a further period of six months.

By agreement with the Transvaal Chamber of Mines, the Witwatersrand Native Labour Association were authorized to engage in Nyasaland during the year up to 4,000 native labourers for work on the Rand mines.

For work outside the Protectorate, adequately safeguarded contract labour is considered to be in the best interests of the native, but the fact remains that the majority of natives who wish to proceed abroad to seek work still prefer to travel under their own arrangements.

A labour branch of the Provincial and District Administration was instituted during the year, a senior Administrative Officer being appointed in November as Labour Commissioner, to deal with all matters concerning both internal and external labour. The Advisory Committee for the engagement of labour for service outside the Protectorate (mentioned above) is composed of four unofficial members representing Nyasaland farming and Mission interests, and operates under the chairmanship of the Labour Commissioner. An Administrative Officer was seconded in November to act as Nyasaland Labour Officer in Southern Rhodesia, where the majority of Nyasaland native emigrants are working.

## **IX.—WAGES AND COST OF LIVING.**

### **European.**

Nyasaland has recovered to some extent from its impoverished condition of the last few years and the recovery is reflected in a slight improvement in employment. The supply of candidates for unskilled occupations still, however, exceeds the demand; and, while the balance of unattached labour available in the Protectorate remains unabsorbed, the necessity remains for the restriction of European immigration to exclude persons who wish to enter the country in search of employment, and even to those who might reasonably expect to obtain it. The expansion of certain Government departments has fortunately enabled a number of Europeans to obtain employment.

There is little variation in prices of either imported commodities or those of local origin. Imported articles are costly owing to freight and customs charges, but local produce is cheap, and it has sufficient variety and quality to supply most of the essential requirements of an European household in the way of foodstuffs. A bachelor may live in reasonable comfort on £15 to £20 a month and a married couple on £25.

### **Native.**

Rates of pay for unskilled labour vary from 6s. to 8s. a month in the Northern Province, and from 6s. to 10s. in the

Southern Province. Housing, firewood and food or food allowance at the option of the employees are provided in addition. Drugs for the treatment of the more common complaints are stocked for free issue by employers and free treatment is given in Government dispensaries. The more serious cases of illness are sent to the nearest hospital, usually at the expense of the employer. The average day's work for unskilled labour varies from four to eight hours; its length is dependent on whether it is task or time work and on the energy of the worker himself.

Skilled labour is paid according to qualifications and efficiency at rates varying from 15s. to 120s. a month.

The rates of pay of the Native Civil Service, which includes artisans as well as clerks, may be said to be similar to those paid by commercial firms, and are as follows:—

Grade III.—£27 per annum by increments not exceeding £2 per annum.

Grade II.—£30 to £45 per annum by increments not exceeding £3 per annum.

Grade I.—£50 to £200 per annum by increments varying from £4 to £12 10s.

The wages paid to domestic servants range from 6s. a month for a pantry or kitchen boy to £2 a month for a cook, plus food allowance.

The vast extremes in their mode of life render it impossible for any accurate statement to be made as to the cost of living of the native population, although it may be said that it varies according to the income of the individual who as a general rule lives to the full extent of his resources.

The staple food is a kind of porridge made from maize flour or cassava; this is supplemented by fish and other relishes according to the means and taste of the individual. Villagers can live almost entirely, and extremely cheaply, on the produce of their gardens, while those in townships can feed themselves at a cost of from 3d. to 1s. 6d. per diem according to the standard which they maintain.

## X.—EDUCATION AND WELFARE INSTITUTIONS.

The European staff of the Education Department consists of a Director and a clerk at headquarters, two Superintendents of Education who are largely engaged in inspection work and are stationed at the two Provincial Headquarters, and a Principal and four assistant teachers at the Jeanes Training Centre.

### European Education.

The European population is approximately 1,800 and it is centred chiefly in the districts of Blantyre, Zomba, Cholo and Mlanje in the Southern Province, and of Lilongwe in the Northern Province.

Education is not compulsory, but more than 95 per cent. of children of school age are enrolled in schools or in correspondence classes.

The education system can be divided into two parts; primary education in schools in the Protectorate for children between the ages of 5 and 11 years, and secondary education in Government schools in Southern Rhodesia.

It is highly desirable, for cultural and climatic reasons, to send children of more than 11 years of age to schools outside the Protectorate. For this reason the schools in the Protectorate are intended for children up to the age of 11 only. There are four such schools, two having boarding accommodation. All the schools are under Mission or private management, and are inspected and aided by Government.

The fees charged range from £5 per annum for tuition in the junior classes, to £42 per annum for board and tuition.

If parents are unable to pay, the fees are remitted wholly or in part and a correspondingly increased grant is made by Government. The Government grant represents about 50 per cent. of the school's revenue. In a few cases parents educate their children through the medium of a correspondence course conducted by the Department of European Education in Southern Rhodesia.

The very great majority of children over the age of 11 are sent to schools in Europe, South Africa and Southern Rhodesia. Any parent who is unable to meet the expenditure involved may apply to Government for a bursary which enables the child to be educated in a Government School in Southern Rhodesia. The number of Nyasaland children attending these schools has grown considerably in the past few years. In 1937 the number was 70. Of these, 17 were in receipt of Government bursaries, which amounted in the aggregate to £690. The children generally return to Nyasaland for the holidays; substantially reduced rates are afforded by the Railway, and a lady appointed by the Nyasaland Council of Women travels on the school train to take care of the younger children.

The following table gives details of expenditure on European Education and enrolment in the local schools:—

*A. European Education (Primary).*

Management.	Enrolment of pupils.			Expenditure by Government.		
	Boys.	Girls.	Total.	Scale of Fees (tuition only per annum).	Expenditure from management funds (including fees) estimated.	Total.
				Number of Teachers.		
				Average attendance.		
<i>a.</i> Mission	...	2	38	53	£1,600	£1,677
<i>b.</i> Private	...	2	91	67	£158	£690

### African Education.

With the exception of the Government-controlled Jeanes Training Centre all schools for Africans are conducted by the Missions, and the task of the Education Department is to advise and co-ordinate. Grants are paid to approved Mission schools, and of the total of £18,787 spent on African education in 1937, £11,250 was paid directly in such grants.

All these schools are primary or vocational in character. For the past three or four years the question of the provision of facilities for secondary education has been engaging the attention of the Government and the Missions. The report of the Colonial Office Commission on Higher Education in East Africa is therefore of considerable significance, and there are indications that a considerable scheme of secondary education for Africans, which may well envisage close co-operation with Northern and Southern Rhodesia, will shortly be framed.

Enthusiasm for education continues and increases. Statistics for the year again show a considerable increase in enrolment and, what is more significant, a marked improvement in average attendance. Of an African population of 1,600,000, nearly 200,000 are enrolled in schools.

In the report for 1936 reference was made to an experiment in local compulsory education. The experiment has been a great success, and other Native Authorities are now considering compulsory education in areas where their people show marked enthusiasm.

In addition to its regular course for training supervisors and community workers the Government Jeanes Training Centre conducted its annual course for Native Authorities, and this course is in no small way responsible for awakening the interest of the Chiefs in education. The course includes lectures of all the departments which deal directly with Africans.

Statistics relating to pupils, schools and expenditure on African education are appended.

B. Native Education (Primary and Vocational).

Primary Schools.		Vocational Schools.		Government Expenditure.			
Number of Schools.	Enrolment.	Number of Schools.	Enrolment.	Mission Expenditure.	Grants.	Administration and Government Schools.	Total.
	Boys.	Girls.	Boys.	Girls.	£	s. d.	£
a. Government ... ...	—	—	†1	24	5	—	—
b. Mission ... ...	—	—	—	—	—	—	—
Church of Scotland Mission, Livingstonia.	392	17,377	8,389	8	121	12	5,850 2 9
Church of Scotland Mission, Blantyre.	281	12,471	4,812	5	55	68	6,753 1 5
Universities Mission to Central Africa.	150	4,271	2,695	4	45	56	3,084 3 5
White Fathers Mission ...	775	17,948	18,434	8	197	226	No regular fees. Nil 11,013 0 0
Montfort Marist Mission ...	990	23,453	18,159	3	164	224	7,898 13 6
South East African Mission of 7th Day Adventists.	158	6,117	2,428	5	112	152	3d. to 8s. 3d. to 8s.
Churches of Christ Mission	41	1,076	859	2	20	30	1d. to 6s. 1d. to 6s.
Nyasa Mission ...	104	3,299	1,204	1	19	—	832 0 0
Zambezi Industrial Mission	108	2,484	2,017	1	30	—	1,441 19 3
Dutch Reformed Church Mission.	1,001	22,214	21,572	7	14	159	1,074 15 0
South African General Mission.	98	2,692	1,893	1	—	37	11,464 4 3
African Methodist Episcopal Church.	2	80	51	—	—	4	745 9 6
Providence Industrial Mission.	4	171	69	—	—	—	*24 12 0
African Church of Christ.	1	62	30	—	—	—	*228 4 0
African Presbyterian Church	7	337	161	—	—	—	*64 9 0
Miscellaneous	—	—	—	—	—	—	*17 16 0
Totals ... ...	4,112	114,052	82,773	46	801	988	11,250 0 0
					58,216 13 8		18,786 19 2
							39

\* Estimated.

† Jeanes Training Centre.

### Indian Education.

The Asiatic population of the Protectorate is approximately 1,500, the proportion of males to females being four to one. It is estimated that there are about 120 Asiatic children of school age. There may be an equal number of half-caste children of varying extraction.

The Indians, as traders, are found all over the country, but about 50 per cent. live in the districts of Blantyre and Zomba. Most Missions admit Asiatics and half-castes into their African schools. There are two schools for Asiatic and half-caste children: these are situated in Limbe and Zomba, and are aided by Government. The Limbe school, which has accommodation for boarders, is conducted by the wife of an Indian doctor: the school in Zomba is managed by a committee of local Indians, and the master is a trained teacher imported from India. The Limbe school has 24 pupils and the Zomba school 18.

## XI.—COMMUNICATIONS AND TRANSPORT.

### Shipping.

Except for the steamers of the British India Line, which maintain a regular mail service, there are no fixed dates of sailings from Beira to England, although the intermediate vessels of the Union Castle Mail Steamship Company call frequently at Beira. The sea voyage from England to Beira takes about 30 days by these steamers, and from five to six weeks by other vessels.

Prior to the opening of the Trans-Zambezia Railway in 1922, the main means of communication with the sea was by the Shire and Zambezi Rivers to Chinde; but since then river transport has declined and is now restricted to a small traffic, mainly in sugar and salt, between Zambezi ports and Port Herald on the Shire. Water transport is now, therefore, mainly confined to Lake Nyasa, and this avenue may be expected to become of increasing importance now that the northern extension of the railway has been completed.

For many years the Government Marine Transport Department operated a monthly sailing of the s.s. *Guendolen* from Fort Johnston, carrying goods and passengers to various ports on the Lake. The round trip took fifteen days, and calls were made at a number of small ports, the principal being Domira Bay, Kota Kota, Nkata Bay, Florence Bay, Karonga, and Mwaya in Tanganyika. There are also in commission on the Lake two vessels belonging to the Universities Mission to Central Africa, and one privately-owned steamer.

In 1936 the Nyasaland Railways took over the existing Lake service from Government and inaugurated an auxiliary service, for which purpose a new motor-driven vessel, the M.V. *Mpasa*, was put into commission. This vessel was transported in sections to the Lake shore, where it was erected and successfully launched on the 20th of December, 1935. The deadweight cargo capacity is 250 tons and sleeping accommodation for four European passengers is provided.

### Railways.

Communication with the sea is effected by the Nyasaland Railways and the Central Africa Railway running to the north bank of the Zambezi River and the Trans-Zambezia Railway which runs from the south bank to Beira. The river termini of these railways were situated at Chindio and Murraça respectively and were connected between these two points by a steamer ferry. The difficulties and delays in transhipping heavy goods traffic by means of this ferry service were enormous, and in 1930 the project of providing a bridge over the Zambezi River between Sena on the south and Dona Anna on the north bank, about 26 miles upstream from Murraça, was put into effect. Rapid progress was made, and, on the 1st of March, 1935, the first passenger and mail trains crossed the Zambezi Bridge, thus establishing through communication between Nyasaland and the port of Beira and completing the project of giving Nyasaland reliable and unbroken access to the seaboard. The bridge has a total length of 12,064 feet, or 2.285 miles, and approximately 17,000 tons of steelwork were used in its construction. It is the longest railway bridge in the world.

In 1934 an extension of the Nyasaland Railways from Blantyre to Salima, a distance of 160 miles, was opened for traffic.

Nyasaland now possesses a continuous transportation system extending from her most northerly boundary to the final outlet at Beira, the third most important port in the South African sub-continent.

Of the Nyasaland Railways and Central Africa Railway, 289 miles lie within the Protectorate and 24 miles in Portuguese Territory, while the entire 182 miles of the Trans-Zambezia Railway lie in Portuguese Territory. All these railways are of 3 feet 6 inch gauge and are fully equipped for the conveyance of goods and passengers. They are under one combined management locally, and share a common office and management in London.

Nyasaland Railways, Ltd., was registered in October, 1930, to acquire the debenture stock and shares of the Shire Highlands Railway, Nyasaland, Ltd., which had previously owned and operated the line between Blantyre and Port Herald, and

also the greater part of the issued share capital of the Central Africa Railway Company, Ltd., which owns the line from Port Herald to Dona Anna on the north bank of the river. The Trans-Zambezia Railway Company, Ltd., was registered in 1919 to construct and work in the territory of, and under concession from, the Companhia de Mocambique, 156 miles of railway from Murraça (since extended to Sena, a further 25 miles) on the southern bank of the Zambezi River to Dondo on the Beira Junction Railway, 18 miles from Beira, the Company to have running rights over these 18 miles of Beira line, with terminal and other facilities.

### Roads.

The total mileage of main roads, exclusive of those in townships, is 1,873, classified as follows:—

	Aggregate Length. Miles.				
<i>Class I.—Paved surface.</i>					
(a) Full width ... ... ... ...	4				
(b) Tracks or strips ... ... ... ...	2				
<i>Class II.—Improved surface.</i>					
(a) Water-bound macadam ... ... ...	112				
(b) Gravel, laterite, etc.... ... ... ...	7				
<i>Class III.—Natural surface.</i>					
(a) All-weather ... ... ... ...	804				
(b) Seasonal ... ... ... ...	944				
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total ... ... ...	1,873				
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

In the category “Principal District Roads” are 578 miles, of which 241 are normally useable throughout the year and 337 in the dry season only. Other District Roads total 1,305 miles of which 682 miles are suitable in the dry weather for light lorries and 623 miles for passenger cars only. The total mileage of roads maintained by the Government is 3,756.

The road system reaches all areas of production not directly served by rail or lake steamer and gives access by motor-car (in a few cases during the dry season only) to all administrative stations.

Road traffic between Nyasaland and neighbouring countries is increasing yearly. The following are the number of vehicles recorded as crossing the border during 1937 on the routes mentioned:—

Blantyre-Mwanza-Tete-Salisbury (Portuguese East Africa and Southern Rhodesia) 988 lorries and 572 cars.

Mlanje-Quelimane and Pebane (Portuguese East Africa) 257 lorries and 888 cars.

Lilongwe-Fort Manning-Fort Jameson-Lusaka (Northern Rhodesia) 726 lorries and 647 cars.

Mzimba-Fort Hill-Tunduma-Mbeya and Abercorn (Tanganyika and Northern Rhodesia). Passage of vehicles not recorded.

The first three routes mentioned are used throughout the year, but the last is normally closed to traffic from the end of December to the middle of May. This route, which is the shortest between South Africa and Kenya, is used to an increasing extent by travellers on both business and also pleasure. There is an insistent and growing demand that this road, which also has strategic importance, shall be open through the year, and improvements are in progress. These and other items of road construction are described in Chapter XII.

### Air.

There was no large increase in the number of passengers travelling by air in 1937, but a very much larger quantity of mails and goods was carried, owing partly to the inauguration of the Empire air mail service.

The twice-weekly services between Nyasaland, Salisbury and Beira were maintained with commendable regularity by Rhodesia and Nyasaland Airways, Limited.

The aircraft belonging to the Nyasaland Aero Club and its members were constantly in use for the training of pilots and other duties. On five occasions these machines were used, in emergency, to convey doctors, nurses and patients to and from remote districts. The ease and rapidity, as well as the increasing use, of this method of transporting doctors and sick persons suggest that in the near future a properly equipped ambulance machine may prove not only a necessity but also an economy.

The scheme of training pilots for defence purposes, which was begun by the Aero Club in 1936, was continued in 1937. Pilots passed in the previous year were given refresher courses and more advanced flying training, while four more pilots were trained to "A" standard and two others to the stage where they made their first solo flights. These efforts of the club were subsidized by Government to the extent of £200 during 1937, and a more ambitious scheme of training is now under official consideration. This scheme, if adopted, will enable the Aero Club to acquire an additional machine and treble the output of trained pilots.

The limited resources of the Protectorate make the construction and maintenance of proper aerodromes and landing-grounds a matter of some difficulty. Nevertheless, progress has been maintained, and in spite of the inadequacy of the sums which it was possible to allocate for the purpose, most of the existing grounds have been considerably improved.

### Motor Transport.

The following table gives statistics of the motor transport in use in Nyasaland during the past ten years:—

Type of Vehicle.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
Cars and lorries	1,044	1,096	1,267	1,255	1,315	1,263	1,217	1,286	1,331	1,406
Agricultural Tractors.	—	—	—	—	—	—	—	—	—	14
Trailers ...	105	98	104	102	103	97	106	93	90	84
Motor bicycles and side-cars.	1,139	1,187	1,211	866	908	783	0	630	561	529
Totals.	2,288	2,381	2,582	2,223	2,326	2,143	2,023	2,009	1,982	2,033
Percentage increase.	20·6	4·1	11·85	—	4·63	—	—	—	—	2·57
Percentage decrease.	—	—	—	14·17	—	7·88	5·59	·69	1·56	—

Of the 2,033 motor vehicles in Nyasaland, 1,575 are owned by Europeans, 253 by Asiatics and 205 by Africans. These figures represent a ratio of one vehicle to 1·16, 6·15 and 7,900·14 of the European, Asiatic and African populations respectively, or one to 798·29 of the total population.

Light saloon cars of from 7 H.P. to 14 H.P. are the most popular models for private use. Light trucks of the Ford V8 and Chevrolet 6 types are very popular with residents living in country districts.

Transporters appear to favour the medium fast lorry of 50/65 cwt. pay load capacity. At present there are 14 heavy Diesel lorries in the Protectorate: the use of this type is steadily increasing.

The number of motor cycles is decreasing each year, because light cars, which afford protection from sun and rain, are found to be more suitable for long-distance runs. Of the African-owned motor vehicles, 85·36 per cent. are second-hand motor cycles.

### Postal.

There are 45 post offices in the Protectorate and one office which transacts telegraph business only. These offices are spread throughout the whole country from Karonga in the north, approximately 18 miles from the Tanganyika border, to Port Herald in the south, 16 miles from the Portuguese border. They are connected by mail services varying in frequency from once daily to once weekly.

A new post office was opened in June at Salima, the northern terminus of the Nyasaland Railway.

Mails are forwarded by air, rail, motor lorry, lake vessel, bicycle and mail carrier. The mail for the most northerly offices is conveyed from the railhead at Salima to Mzimba by lorry and beyond that point is forwarded by mail carriers. Mails for Ncheu, Mlangeni, Dedza and Mkhoma are off-loaded at Balaka station and conveyed to their destination by motor lorry. Those for other northern offices are conveyed from Blantyre to Salima by rail and thence to Dowa and Lilongwe by motor lorry. A further motor service operates to the border station of Fort Manning and continues thence to Fort Jameson in Northern Rhodesia.

The old mail carrier service between Blantyre and Zomba has been replaced by a cycle service. The mail carrier services are maintained during all weathers, and carriers are provided with shot-guns for protection against wild animals.

From Karonga the carrier service is continued west to Abercorn and Fife in Northern Rhodesia, and north to Tukuyu in Tanganyika Territory. Other branch carrier services connect the lake stations to the main route.

Once every two weeks, letter mails for the lake stations and parcel mails for all stations north of Mzimba are forwarded by rail to Chipoka, on the northern extension of the Railway, for transfer to the s.s. *Guendolen* or m.v. *Mpasa* which, after a round trip of Lake Nyasa, return 15 days later with outgoing mails.

Following the inauguration of the Empire Air Mail scheme in June, all letter mails to and from countries participating in the scheme are now despatched and received by air through Chileka Airport—11 miles from Blantyre. These countries include Great Britain, Southern and Northern Rhodesia, South Africa, Tanganyika and Kenya. The Rhodesia and Nyasaland Airways Limited operate a feeder service to conduct with the Imperial Airways main route at Beira, once weekly direct to and from Beira and once weekly through Salisbury. In addition there is a third service to and from Salisbury. The twice-weekly letter mail to and from England, taking approximately a week in each direction, is a great boon to Nyasaland.

Surface mails are despatched to, and received from, South Africa, Southern and Northern Rhodesia and Portuguese East Africa by rail twice weekly. Overseas surface mails are despatched and received once weekly, and are conveyed by rail to and from Capetown via Beira and Salisbury, and by Union Castle steamer between Capetown and Southampton. The time taken from Blantyre to Southampton is 22 days, and in the reverse direction  $21\frac{1}{4}$  days. Overseas parcel mails are railed to and from Beira and carried by steamer between that port and London. The time occupied in transit is approximately 41 days.

Surface mails circulating to and from external countries are dealt with by the travelling post office which operates between Blantyre and Sena (Portuguese East Africa) twice weekly in both directions.

### Telegraphs.

The main telegraph system was originally constructed by the African Transcontinental Telegraph Company, whose driving force, the late Cecil Rhodes, conceived the idea of linking up by telegraph the distant countries under British control north of the Zambezi, with a view to the establishment of an Empire Cape to Cairo telegraph route. He thus hoped to secure an alternative and cheaper route between South Africa and Great Britain than that provided by the submarine cable from Cape-town, on which the charge was then 11s. a word.

The line was built from Salisbury, Southern Rhodesia, via Tete in Portuguese territory, to Blantyre, in 1896. From Blantyre the construction proceeded northwards along the Lake shore to Karonga, in the extreme north of the Protectorate, where it branched north-west of Fife and Abercorn and, crossing the then German East Africa border, proceeded northwards through Bismarcksburg (now Kasanga) to Ujiji on the eastern shore of Lake Tanganyika.

Ujiji was reached in 1902, the year in which Cecil Rhodes died, and with his death the construction ceased. The dream of linking up the south by direct telegraph line with the north never matured. The advent, since those days, of railways, motor roads, and wireless telegraphy, including beam working, has helped to achieve in other ways the objects for which the line was built. Cable rates by beam wireless from Southern Rhodesia to Great Britain are now 1s. 2d. and 7d. a word. From Nyasaland the charges are 1s. 7d. and 9½d. A branch line was constructed by the African Transcontinental Telegraphy Company from Domira Bay to Fort Jameson, where a telegraph office was opened in 1898. In 1936 the rise in the Lake submerged the Domira Bay office and the line to Fort Jameson now branches off at Salima.

In 1925 the Company went into liquidation and its immovable assets, represented by over 1,000 miles of well-built telegraph line and numerous telegraph offices in Nyasaland, Northern Rhodesia and Tanganyika, were taken over by the respective Governments at a purchase price of £12,500, the Nyasaland share being £10,750. The section running through Portuguese territory was purchased for £2,000, and the Nyasaland and Southern Rhodesia Governments shared the cost on the basis of line mileage each side of the Zambezi.

Since that date new lines have been built by Government and additional offices opened. The total number of offices is

now 27, excluding 17 public telegraph offices operated by Nyasaland Railways, Limited.

The continued rise in the level of Lake Nyasa gives cause for anxiety and several deviations from the former line had to be made during the year.

### **Telephones.**

There are nine post office telephone exchanges, and three railway and eighteen post office public call offices, providing telephone intercommunication between all important centres south of the Lake. The total number of telephones in use is now 347.

### **Wireless.**

There are no wireless transmitting stations operating in the Protectorate either for commercial or broadcasting purposes.

The number of wireless receiving sets used by private persons continues to increase and during the year 16 new sets were licensed. Of the 276 sets at present in use, 200 are of British make, 48 American, 19 Dutch and the remainder the product of various other countries.

## **XII.—PUBLIC WORKS.**

In the Protectorate budget for 1937 the provision made for public works amounted to about 8 per cent. of the total ordinary expenditure. The actual recorded expenditure, compared with that of the previous year, was as follows:—

		1936.	1937.
		£	£
Public Works Department	...	23,415	24,175
Public Works Recurrent ...	...	13,959	15,315
Public Works Extraordinary	...	10,645	16,364*
Loan Expenditure (Roads)	...	1,020	9,309
Colonial Development Fund	...	1,439	355
		<hr/> £50,478	<hr/> £65,518

\* Includes £5,404 charged to Colonial Development Fund in previous years and now transferred.

The design, construction and maintenance of all public works, with the exception of municipal undertakings in the townships of Blantyre and Limbe, and of village water-supplies under the control of the Geological Survey Department, are in charge of the Public Works Department.

The maintenance of district roads, which aggregate 1,305 miles in length, is undertaken by the District Administration with funds allocated for the purpose by the Department. The mileage of roads maintained by the Public Works Department,

comprising the main and principal distinct roads, is 2,451. In 1937 the cost of maintenance of the road system, aggregating 3,756 miles, was £9,976, representing an average expenditure of £2 13s. 1d. per mile.

The transfer to Native Authorities of responsibility for the upkeep of certain district roads is considered desirable, but has not up to the present taken place to any considerable extent.

The total capital value of Government buildings is assessed at £236,590 and the cost of their maintenance in 1937 was £3,478, or 1·47 per cent. of their value.

In Zomba, Blantyre, Limbe, Mlanje, Fort Johnston, Lilongwe and Mzimba building repairs are under direct supervision by the Public Works Department. At the other stations technical supervision is only occasionally available and the District Administration undertakes the ordinary upkeep of the buildings with a portion of the funds provided, the remainder being used for major repairs which are carried out by travelling gangs of the Public Works Department.

In the past, the standard of Government buildings, particularly at out-stations, was low, owing mainly to the inadequacy of the funds available for capital expenditure. It follows that these buildings cannot be satisfactorily maintained at a reasonable expenditure and many are in a more or less dilapidated condition. It is much to be hoped that expanding revenues will permit of the replacement, in the near future, of more of the older buildings.

Besides roads and buildings, the Public Works Department maintains pipe-borne water supplies at Zomba, Lilongwe and Mlanje, and various wells at other stations. It also operates, on a profitable basis, the hydro-electric undertaking in Zomba, which in 1937 showed an excess of revenue over expenditure of £413. Amongst its minor activities may be mentioned the supply and upkeep of furniture, etc., in Government offices and quarters. Most of this furniture is manufactured in the workshops in Zomba where, apart from the diverse requirements of the Public Works Department itself, numerous articles in great variety are also made for other Departments. Similarly, the stores branch of the Department not only imports and issues the materials, etc., required for its own purposes, but it also stocks various items in constant use by other Departments.

The principle upon which the Department is organized has been to provide a permanent establishment adequate to carry out efficiently the work provided for in the annually recurrent votes, together with such capital works as may be expected, under normal conditions, to be financed by votes under Public Works Extraordinary. The establishment is at present below strength in the supervisory grades.

At the opening of the year several extraordinary items of building construction were in progress which had been commenced late in 1936.

In the course of the year the more important items completed were various.

An extension was made to the Printing Office at Zomba. At Blantyre a hostel for repatriated native labourers was built. At Lilongwe houses for an Agricultural Officer, a Superintendent of Education and a Postal Surveyor were built, together with a District Prison and an office and laboratory for the Veterinary Officer.

A Post Office was completed at Salima with quarters for an Asiatic customs clerk and quarters for the postal and customs native staff.

Officials' houses at Kota Kota were mosquito proofed.

At Port Herald the Customs officer's house was rebuilt. At the Jeanes Training Centre, near Zomba, houses were completed for an Agricultural Instructor and an Assistant Mistress. These were financed by the Colonial Development Fund. At Zomba itself the building of an upper storey to one of the main blocks of the Central Prison was continued, since shortage of roofing iron had precluded its completion in 1936.

The sanitation scheme for Zomba was continued and completed, except for certain public latrines for natives.

Among the more important of the additional extraordinary works financed in 1937 the Administrative Offices at Mlanje were partially roofed by the end of the year while the Court House foundations were completed, with ant-proof course.

Detention cells at the Police Office were built at Limbe and at Lilongwe a house for the Police Superintendent was begun together with quarters for a super-grade native clerk. These were built to roof level by the end of the year.

The extension to the Post Office at the same place was also ready for roofing at the end of the year.

With regard to capital improvement of the road system, the year commenced with the completion and opening, in January, of a new high-level bridge across the Shire River at Kambalame, on the Blantyre-Tete-Salisbury road. It concluded with the commencement of construction of a new high-level bridge across the same river near the Murchison Falls, on the main road from Blantyre to the north. In both cases the construction of high-level bridges in substitution for the former low-level crossings has been necessitated by the progressively increasing flow in the river which, after a lapse of many years, is resuming its function of discharging from Lake Nyasa into the Zambezi the surplus water representing the difference between influx and evaporation.

At the third crossing of the Shire by a main road, on the road from Zomba to the north and to Fort Johnston, the Liwonde bridge was partially demolished in 1936 by the pressure and scouring resulting from accumulations of floating *sudd* (a fate which has subsequently befallen the railway bridge lower down). In that emergency a small pontoon was delivered by road and installed as a ferry for light traffic. Early in 1937 it was found possible to navigate a 20 ton barge from Fort Johnston to Liwonde, where it was suitably equipped to provide a service for heavy traffic. It was used successfully for the transport of several hundred tons of air-cured tobacco in the ensuing season and has been used since then to carry the whole of the railway traffic diverted from the Northern Extension by the failure of the railway bridge. So far as can at present be foreseen, the ferry service must be permanently retained since there is no suitable site for the construction of a new bridge except at prohibitive cost.

Considerable improvements were carried out on the main roads in the north. By substitution of permanent reinforced concrete bridging for temporary timber structures, re-alignment to avoid swampy places, additional drainage and culvert installations, the road to Livingstonia has been made passable throughout the year, and it is now suitable for light lorries in the dry season. Considerable progress on a programme of similar works was made also on the inter-territorial road to Tanganyika and Northern Rhodesia via Fort Hill, the ultimate object being, by progressive improvement, to raise this road to all-weather standard.

Several new roads required for agricultural development were constructed from Loan funds.

The Likwenu-Kawinga-Namwera road (18 miles of new construction) begun at the end of 1936 was completed and opened in time for the 1937 tobacco crop, despite the seasonal shortage of labour.

The Midima Hill-Mlomba Hill-Palombe road (27 miles) was completed. The work included the construction of a bridge of two spans of 30 feet and 15 feet respectively, and of other bridges with spans of 27 feet, 24 feet and 12 feet.

The Chonde-Chikuli-Tuchila road (6 miles) and the Palombe-Sombani road (21 miles) were completed except for the super-structure of some bridges. They are to be ready for the 1938 crops.

On the Chambi's Cross-Chitakali road permanent bridges were built in substitution for timber structures.

In the Cholo tea-planting area, where the heaviest traffic occurs in the wet season,  $6\frac{1}{2}$  miles of the Chiromo road were laid with water-bound macadam, and on the Limbe-Cholo-

Luchenza road 9 miles were surfaced either with macadam or laterite. The metalling of these roads is being continued so that by the end of 1938 all the heavily trafficked main roads serving tea estates will be passable without interruption under all conditions.

An experiment was conducted in the treatment of the surface of the main road in Zomba with a mixture of molasses, water, lime and charcoal, to ascertain to what extent this could take the place of bitumen as a binder and sealing-coat. The conclusion is that, while it serves a useful purpose in dust prevention and as a binder under dry-weather conditions, it does not successfully withstand the rains. Its use is therefore an economical proposition only if, through the establishment of a local sugar industry, it can be procured at a very low cost. In that event it is probable that the whole available output of molasses could be utilized with advantage.

### XIII.—JUSTICE, POLICE AND PRISONS.

#### **Justice.**

The courts of the Protectorate consist of the High Court, with jurisdiction over all persons and over all matters in the Protectorate, and courts subordinate thereto. There are also native courts, which are supervised by the Provincial Commissioners.

Subordinate courts are nominally of the first, second and third class with differentiated powers of trial of natives and non-natives, the trial of non-natives being reserved in certain matters to courts of the first and second classes.

There is, however, at present no court of the first class, as Provincial Commissioners do not hold warrants as Magistrates and the former court of the first class presided over by a Town Magistrate no longer sits, as the post was abolished for reasons of economy. The second and third class courts are presided over by the District and Assistant District Commissioners of each district.

The Criminal Procedure Code confers a limited jurisdiction on first and second class courts over Europeans and non-natives, the sentences which may be imposed upon these two classes by a court of the second class being limited to six months.

The graver crimes are tried by the High Court after a preliminary inquiry before a court of the second or third class.

Subordinate courts of the first and second class may try natives for any offence under the Penal Code or any other law, other than treason or misprision of treason, but any sentence of more than six months' imprisonment is subject to confirmation by the High Court.

Subordinate courts have the power to commit serious cases for trial to the High Court, and this is being done to an increasing extent in the case of murder.

In murder and manslaughter cases tried by Magistrates, the procedure laid down in section 202 of the Procedure Code may be adopted. The Magistrate sits with three native assessors and a preliminary inquiry is generally dispensed with. Before the accused can be found guilty or not guilty the Magistrate must forward a copy of the proceedings to the Attorney-General with a memorandum setting forth the opinions of the assessors and his conclusions. The Attorney-General may direct that further evidence be taken or that the case be transferred to the High Court for trial. If satisfied with the trial in the subordinate court he submits a copy of the record to the High Court together with a memorandum of his conclusions. The High Court can then give such directions as it considers necessary and finally if it is "satisfied that the evidence so permits shall direct the Magistrate to enter a finding of not guilty and to discharge the accused from custody or to enter a finding of guilty and pass sentence accordingly". Every such sentence is subject to confirmation by the Judge. When sentence of death is passed the accused must be informed of his right to appeal to His Majesty's Court of Appeal for Eastern Africa within 30 days.

Consideration is now being given to the repeal of this procedure. When the repeal has been passed, all murder and manslaughter cases will be tried by the High Court after preliminary inquiry.

In civil matters, courts of the first, second and third class have jurisdiction over Europeans and Asiatics in all matters in which the amount or value in dispute does not exceed £100, £50 or £25 respectively. "Courts of the first and second class may subject to the provisions of article 20 of the British Central Africa Order-in-Council, 1902, try any native civil case and courts of the third class may subject as above and subject to the provisions of section 13 (of the Courts Ordinance—Cap. 3 R.L.N.) try any such case". Section 13 reserves certain cases "of such importance as not to fall under the head of mere district discipline" to courts of the first or second class or the High Court, unless the Governor shall otherwise direct.

Native courts were established in 1933 to exercise over natives such jurisdiction as the Governor may by warrant under his hand authorize a Provincial Commissioner by his warrant to confer upon the court. Certain territorial limits are set by the Ordinance and certain subjects are reserved to other courts. For offences against native law and custom they may impose a fine or may order imprisonment or corporal punishment "or may inflict any punishment authorized by native law or custom,

provided that such punishment is not repugnant to natural justice and humanity and the fine or other punishment shall in no case be excessive but shall always be proportioned to the nature and circumstances of the case."

The High Court may call for the records of all courts subordinate to itself to satisfy itself as to the legality and propriety of the proceedings and sentence.

Records of the native courts are similarly dealt with by District Commissioners. Native courts are not under the supervision of the High Court but of the Provincial Commissioners.

Appeals lie from subordinate courts to the High Court (except in cases tried under the provisions of section 202 of the Criminal Procedure Code when the appeal is to His Majesty's Court of Appeal for Eastern Africa).

Appeals from native courts lie to the District Commissioners, Provincial Commissioners and ultimately to the Judge of the High Court.

The Judge arranges circuits at convenient times and so far as is possible fixes the venue in or near the district in which the alleged crime has been committed. He also inspects the court books and files of subordinate courts and discusses points of law arising out of the cases tried by Magistrates. He is *ex officio* Visiting Justice of the Central and District prisons of the Protectorate.

### **Police.**

The Nyasaland Police Force consists of eleven Officers, two Inspectors, one Assistant Inspector, three Asian Sub-Inspectors and 499 African ranks.

Although essentially a civil force, all the rank and file are armed with S.M.L.E. rifles, and in case of war the force is liable to be called up to serve the regular troops.

The Headquarters in Zomba comprise a Training Depot, Criminal Investigation Department, Finger Print Bureau, Immigration Department, Passport Office and Central Registries of Motor Vehicles, Firearms and Pedal Bicycles.

Owing to the limited European staff, professional police officers are in charge of units in the more settled areas of the Southern Province only. In other areas the District Commissioners are in command of the police posts in their respective districts. It is proposed to extend the former system to the Northern Province in 1938.

In areas where police officers are in charge, statistics of crime are recorded in detail. During 1937 the number of cases dealt with by the police in such areas was 2,961 as against 2,864 in the previous year, an increase of 97. Offences against the person numbered 245 or 8·27 per cent. of the total number of cases reported, while offences against property were 881 or 29·75 per cent.

Property reported stolen was valued at £1,618 8s. od. Of this, property to the value of £829 13s. 6d. was recovered, representing 51·26 per cent.

The number of true cases of murder was ten as against 14 during the previous year.

### Prisons.

The established prisons comprise a Central Prison at Zomba, 19 district prisons situated respectively at the headquarters of each administrative district, a district prison at Limbe, and temporary prisons at Chileka aerodrome in the Blantyre District at Mkulas in the Upper Shire District. The Central Prison is for the reception of Europeans, Asiatics, long-sentence Africans and recidivists. The other prisons are for short-sentence non-recidivist Africans.

All prisons are under the general control of the Chief Inspector of Prisons who is also Commissioner of Police. The Central Prison is supervised by an European Superintendent assisted by a Deputy Superintendent and a gaoler. The warder staff is recruited from Africans. The European accommodation consists of a section of five single cells. The non-European section consists of two blocks, one of which contains 28 wards, 12 to accommodate eight prisoners each and 16 with a capacity for 12 convicts each. The second block has hitherto never been completed according to plan and, containing only 50 single cells, provided insufficient accommodation. Additions and improvements were put in hand during the year and, although not quite completed at the end of 1937, this enlarged block then provided four single cells for Asiatics, 58 single cells for African males, six association wards for eight prisoners each, and four wards for ten prisoners each.

Within the main walls there is a hospital section. Outside the walls there are isolated sections consisting of one association ward with four cells for venereal cases, one association ward with four cells for lepers, and two association wards with four cells for infectious cases. In addition there are two wards for newly arrived prisoners. The female section contains one ward and four cells. Male adult prisoners are classified as follows:—

Section I.—Prisoners sentenced to imprisonment with or without hard labour for a term of three years and upwards.

Section II.—Prisoners sentenced to imprisonment with or without hard labour for a term of less than three years.

Prisoners in each section are graded as follows according to their character and antecedents so far as can be ascertained:—

Grade A.—Not previously convicted for serious crime and not habitually criminal.

Grade B.—Previously so convicted or habitually criminal and of corrupt habits (recidivist grade).

The additional accommodation provided by the completion of the main blocks in the prison will now permit of the segregation of prisoners in A and B grades.

Technical training is given in the prison workshops. Trades include carpentry, tinsmithing, tailoring, weaving, etc.

District prisons of the older type mostly consist of association wards but all new constructions are being put up according to a standard plan on modern lines. These prisons are under the supervision of Administrative or Police Officers with staffs of African warders or policemen.

The number of admissions to prisons during 1937, compared with that for 1936, was:—

		1936.	1937.
European males ...	...	5	2
Asiatic males ...	...	2	3
Coloured males ...	...	6	—
African males ...	...	4,810	4,523
African females ...	...	82	78
		<hr/>	<hr/>
		4,905	4,606
		<hr/>	<hr/>

The daily average number of persons in all prisons during 1937 was 853.11 as against 901.47 for the previous year.

The general health of the prisoners has been very good. The number of admissions to hospital was 404 as against 622 during 1936. The daily average on the sick list was 42.88. The number of deaths was eight compared with 14 in the previous year. The death rate per thousand of the total prison population was 1.70. Seven executions were carried out in 1937.

#### XIV.—LEGISLATION.

The following is a résumé of the more important legislation enacted during the year 1937:—

No. 1. *The Lunacy (Amendment) Ordinance*, 1937, empowers the Governor to order the removal abroad of non-native lunatics if proper facilities for their care cannot be provided within the Protectorate.

No. 2. *The Mining Ordinance*, 1937, provides for the amendment and consolidation of the law as to mines and minerals.

No. 5. *The Fugitive Offenders (Pursuit) Ordinance*, 1937, authorizes the police of adjoining Territories which make reciprocal arrangements to pursue and arrest within certain areas of the Protectorate fugitives from such Territories.

No. 6. *The Bills of Sale Registration (Amendment) Ordinance*, 1937, extends the time for the filing and registration of Bills of Sale from seven to 14 days of the making and execution respectively.

No. 25/26. *The King's African Rifles Ordinance*, 1936, did not receive the Governor's assent until 5th June, 1937. It was introduced to ensure uniformity in the establishment and government of the King's African Rifles throughout the territories where the force is serving.

No. 11. *The Income Tax (Amendment) Ordinance*, 1937, enlarges the scope of the Income Tax Ordinance to provide for taxation of that portion of the ultimate profits, on sales outside the Protectorate, which is regarded as attributable to the processes applied, within the Protectorate, to tobacco leaf, seed cotton and other commodities.

No. 15. *The King's African Rifles (Amendment) Ordinance*, 1937, grants to a holder of the Long Service and Good Conduct Medal or to his next-of-kin a gratuity of £5.

No. 16. *The Tobacco (Amendment) Ordinance*, 1937, incorporates the Native Tobacco Board and enables it to hold property in its own name and do all such acts as bodies corporate may by law perform.

No. 17. *The Tobacco Marketing Ordinance*, 1937, provides for the establishment of a Tobacco Control Board, the licensing of Auction Floors, and the control of the sale and export of tobacco. The essential provisions of the Flue-cured Tobacco Marketing Ordinance, 1936, are incorporated in this Ordinance and that Ordinance is repealed.

*The Criminal Procedure Code* (Government Notice No. 8 of 1937) appoints certain native police officers to be Public Prosecutors in some instances before subordinate courts.

*The Nyasaland Protectorate (Mineral Rights) Order in Council*, 1936 (Government Notice No. 9 of 1937) relates to the surrender by the British South Africa Company of mineral rights in some parts of the Protectorate.

*The Air Navigation Directions*, 1937 (Government Notices Nos. 14 and 74 of 1937) make rules regarding the registration of aircraft, licensing of personnel and aerodromes and relevant matters.

*The Licensing Ordinance* (Government Notice No. 34 of 1937) makes rules including a ban on hawking within three miles of a township.

*The Mining Regulations*, 1937 (Government Notice No. 38 of 1937) are issued in accordance with section 127 of the Mining Ordinance, 1937, and regulate the rights of prospectors and indicate the necessary formalities.

*The Dangerous Drugs Regulations*, 1937 (Government Notice No. 65 of 1937) are issued in accordance with section 13 of the Dangerous Drugs Ordinance and prescribe certain forms to be used with respect to the importation of narcotic drugs.

## XV.—BANKING, CURRENCY, AND WEIGHTS AND MEASURES.

### **Banking.**

The Standard Bank of South Africa, Limited, maintain branches at Blantyre, Limbe, Lilongwe and Zomba, while Barclays Bank (Dominion, Colonial and Overseas) has branches at Blantyre and Limbe.

The Post Office Savings Bank conducts business at the twenty-three more important offices. A feature of the past year was the increase in the number of native depositors from 1,907 to 2,246. The total number of open accounts rose from 2,366 in 1936 to 2,738 in 1937, while the total amount on deposit advanced from £48,550 to £51,680.

### **Currency.**

English gold, silver and copper coins are legal tender in the Protectorate. The gold standard was abandoned with effect from the 12th of October, 1931, and the English sovereign is now at a premium of 11s. Bank notes issued by the Standard Bank of South Africa, Limited, and Barclays Bank (Dominion, Colonial and Overseas) in the territory of Southern Rhodesia are legal tender in Nyasaland. Silver coins of the denominations half-crown, florin, shilling, sixpence and threepence and cupro-nickel coins issued by the Government of Southern Rhodesia are current in the Protectorate and are legal tender for any amount not exceeding £2.

### **Weights and Measures.**

Imperial weights and measures are in standard use throughout the Protectorate.

## XVI.—PUBLIC FINANCE AND TAXATION.

### **Revenue and Expenditure.**

The revenue and expenditure for the past three years was as follows:—

		Revenue	Expenditure
		£	£
1935	...	648,844	622,874
1936	...	798,426	754,217
1937	...	1,029,933	1,002,548

Loans in aid of the Trans-Zambezia Railway Annuities, and grants from the Colonial Development Fund are included under revenue, while under expenditure are also included disbursements in respect of the same services.

### Public Debt.

The public debt of the Protectorate on 31st December, 1937, amounted to £5,264,100 made up as follows:—

	£
Redemption of Railway Subsidy Lands ...	114,761
East Africa Protectorates Loan, 1915–1920 ...	35,778
Trans-Zambezia Railway Guarantee and Annuities ...	1,543,561
Nyasaland 4½ per cent. Guaranteed Loan ...	2,000,000
Nyasaland 3 per cent. Guaranteed Loan ...	1,570,000
 Total ...	 £5,264,100

### Taxation.

The main heads of taxation, together with their yields, were:—

	£
Customs and Road and River Dues ...	172,702
Hut Taxes ...	132,121
Income Tax ...	34,795
Non-Native Poll Tax ...	4,190
Licences ...	28,941

### HUT TAX.

A hut tax of 6s., if paid before the end of September in each year, and 9s., if paid thereafter, is payable by every adult native owning or occupying a hut. The tax is payable in respect of each hut owned. Exemption is granted in respect of widows and any other person who on account of age, disease or other physical disability is unable to find the means wherewith to pay the tax. District Commissioners may also, subject to the general or special directions of the Governor, exempt from the payment of the whole or any part of the tax any person who produces satisfactory evidence that owing to economic conditions he is unable to pay.

Every adult male native who is not liable to pay hut tax must pay a poll tax equivalent to the tax on one hut.

Employers of natives who have entered the Protectorate from other territories are required to pay tax on behalf of such natives at the rate of one-twelfth of the total tax a month, and may recover the sums thus paid from their employees.

Native visitors who do not obtain employment are exempt from poll tax.

### INCOME TAX.

Every non-native adult male is required to pay income tax as imposed by the Income Tax Ordinance, 1925, as amended, subject to certain abatements and allowances.

No tax is payable on incomes of £300 and under and, in the case of a married man, on £600 and under. There are also

allowances for children and insurance. Companies are taxed at the rate of 2s. 6d. in the pound, subject to relief in respect of double Empire tax.

A poll tax of £2 is imposed on every adult non-native male by the Non-Native Poll Tax Ordinance of 1928.

### LICENCES.

These are imposed under various ordinances and consist of the following, the collection during 1937 being shown against each:—

	£
Arms and Ammunition	841
Bankers	120
Bicycles	2,205
Bonded warehouse	50
Game	490
Hawkers	45
Liquor	694
Miscellaneous	504
Tobacco	1,000
Trading	12,455
Dog	130
Trout	33
Motor Vehicles	6,340

## XVII.—MISCELLANEOUS.

### Lands and Survey.

The Nyasaland Protectorate (Native Trust Land) Order-in-Council, 1936, divides the land of the Protectorate into three classes—Crown Lands, Reserved Lands and Native Trust Land.

Crown Lands are defined as being all lands and interests in land acquired or occupied by or on behalf of His Majesty: Reserved Lands include land in townships, reserves at Government stations, forest reserves and all land alienated prior to the enactment of the Order-in-Council; Native Trust Land is all the land in the Protectorate other than Crown and Reserved Lands.

In Native Trust Land the Governor may grant rights of occupancy for any term not exceeding 99 years.

During the year 1937 five leases of Reserved Lands with a total acreage of 2,136 acres were registered, and four leases totalling 2,004 acres were renewed. Three leases totalling 1,052 acres were converted from short-term leases under the old Crown Lands Ordinance to long-term leases under the present Ordinance.

In Native Trust Land seven rights of occupancy with a total acreage of 6,978 acres were granted.

Eight leases totalling 2,223 acres were formally surrendered, four of them being in connection with conversions to long-term leases and the other four to enable an exchange of freeholds to be effected.

Three leases aggregating 725 acres were determined by re-entry and seven leases totalling 2,290 acres by expiry or on conversion, the whole of the latter acreage being released to the former lessees.

One hundred and nine yearly tenancies, the majority for trading plots, were issued, and 92 tenancies were cancelled, 63 of these being of plots taken up for the purchase of native-grown tobacco, which were no longer required under the altered system of tobacco marketing.

Twelve surveys, covering 5,469 acres, were completed during the year.

### Mining.

The Mining Ordinance, 1937, came into force on the 30th April and the Mining Regulations on the 18th June. The Ordinance provides for all forms of prospecting and mining and the regulations deal with the procedure to be followed and the rents and royalties to be paid.

Prospecting is considerably cheapened and simplified, as a prospector can now obtain for ten shillings a right which authorizes him to prospect over all the Crown mineral areas of the Protectorate for a period of one year, whereas formerly a prospecting licence for a period of six months cost £1 and covered the Crown mineral areas of one Administrative District only.

Activity in prospecting for gold has completely died away and at present only one prospecting right is extant. The reduction in prospecting naturally led to a diminution of the quantity of native gold handled by the local banks and during the year only 2·2 ounces were exported. No discoveries of precious metals or of other minerals of any importance have been reported.

### Immigration.

The Commissioner of Police is the Principal Immigration Officer. He is assisted by all other Officers and Inspectors of Police, as well as by certain District Commissioners and Customs Officers.

The ports of entry are Port Herald, Chileka, Fort Manning, Fort Johnston, Karonga, Mzimba, Dedza, Ncheu, Chikwawa and Mlanje.

All persons arriving in the Protectorate must report to an immigration officer and satisfy him that they are not prohibited immigrants. They should be in possession of passports or other documentary evidence of identity and nationality.

Entry is restricted in the case of persons convicted of serious crime; those suffering from infectious, contagious or mental disease; those likely to be dangerous to peace and good order; and those likely to become a burden upon public funds.

Persons in the following categories, if known to an immigration officer or if their identity is otherwise established, are allowed to proceed without further formality:—

Members of His Majesty's regular naval or military forces; persons accredited to the Protectorate by or under the authority of the Imperial or of any foreign Government; persons domiciled in the Protectorate and not otherwise prohibited from entry; and the wives and children of such persons.

Other non-native immigrants must be prepared to make a deposit of £100 or to produce some other acceptable security. This policy is strictly followed when dealing with persons who appear to be in an impecunious condition and who may be liable to become a public charge. Visitors who arrive for a temporary stay are not put to any inconvenience.

The number of non-native persons, including returning residents and persons in transit, who entered the Protectorate during each of the past five years, is set out as follows:—

	1933.	1934.	1935.	1936.	1937.
Europeans ...	3,507	3,478	3,980	3,759	4,643
Asiatics... ...	1,295	1,342	1,084	1,013	1,228

During 1937 the methods of transport adopted by immigrants arriving in the Protectorate were:—

	Air.	Rail.	Road.	Water.
Europeans ...	352	1,061	3,218	12
Asiatics ...	—	503	725	—

### The Native Welfare Committee.

In the report for 1936 mention was made of the appointment and work of the Native Welfare Committee. It was explained that the purposes of the Committee was to co-ordinate efforts to promote the general natural development of the African along political, social and economic lines.

During 1937 the Committee was strengthened by the appointment of two new members, and it now includes the Provincial Commissioners, the Directors of Medical Services, Agriculture and Education, the Conservator of Forests, the Chief Veterinary Officer and an officer co-opted from the District Administration.

In political development the Committee has been active in recommendations concerning the transfer of services from Government departments to Native Authorities. In this connexion it must be noted that many Native Authorities desire to establish rural dispensaries, and principles and procedure to admit of this laudable practice have been established. Other interesting developments fathered by the Committee have been experiments in Rural Development and Health.

On the social side the Committee has advised on many educational issues, dealing for example with secondary education, and the training of agricultural demonstrators and foresters as

well as of maternity and infant welfare workers. Nutrition and health services have also received considerable attention.

In the economic sphere the greatest advance made on the recommendation of the Committee has been the appointment of an Agronomic Development Sub-Committee to determine the general principles of co-ordinated planning in rural economy and agronomic development. The Committee consists of the Director of Agriculture, the Conservator of Forests, the Chief Veterinary Officer, the Soil Erosion Officer and a representative from the District Administration. One of its first actions was to prepare for the Soil Erosion Officer a programme of work which was subsequently approved by Government.

The main Committee has also advised Government on a multitude of matters including communal marketing and co-operative movements, milk production, marketing of hides, milk and ghee.

## APPENDIX

### GOVERNMENT PUBLICATIONS.

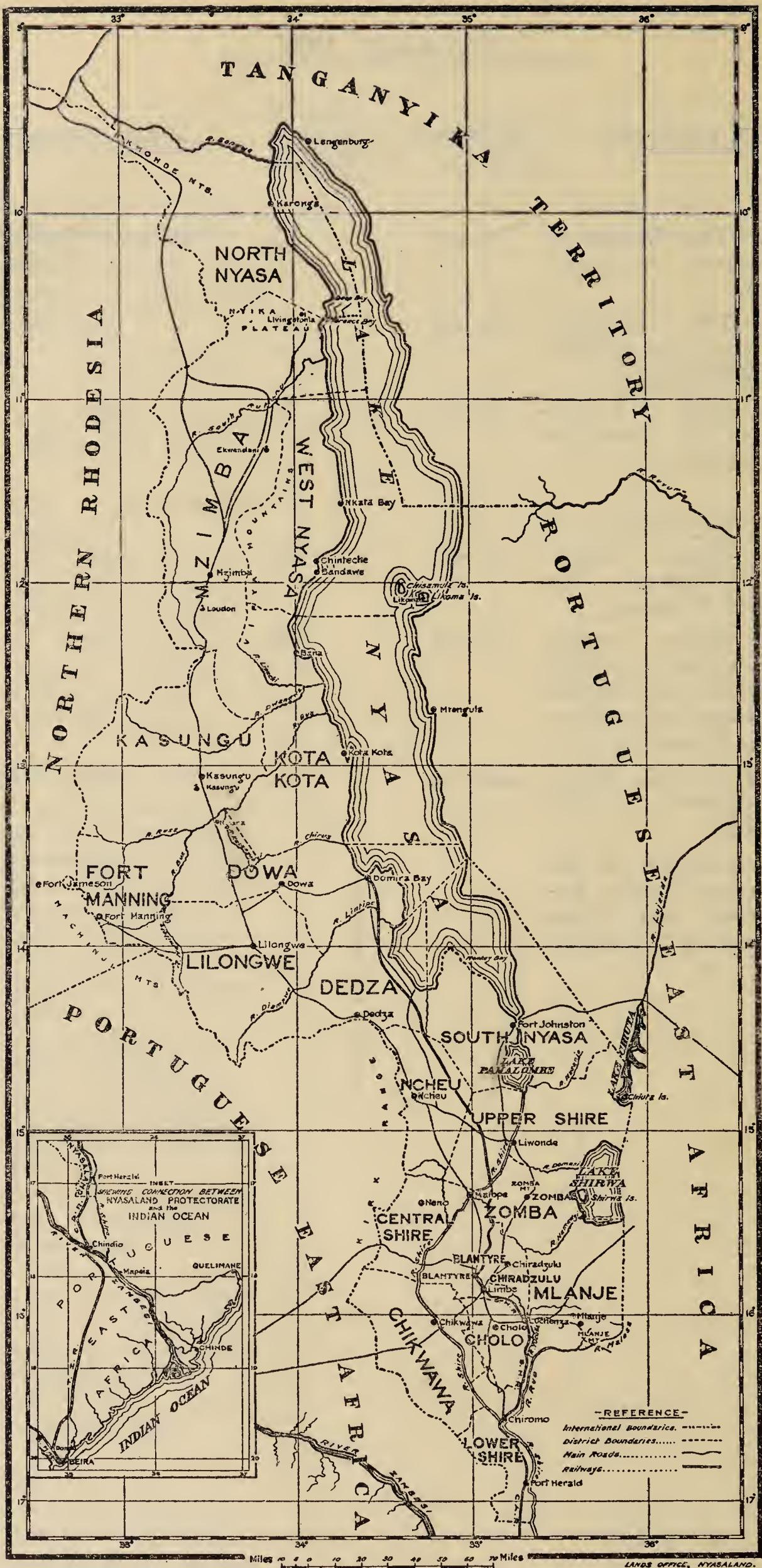
<i>Title of Publication.</i>	<i>Published Price.</i>	<i>Cost of Postage to U.K.</i>	<i>Where obtainable.</i>
<i>Nyasaland Government Gazette.</i>  (Subscription to the Government Gazette includes the free issue of all legislation enacted during the year.)	7s. 6d.	1s. 6d.	Crown Agents for the Colonies, 4, Millbank, London; or Government Printer, Zomba.
<i>Blue Book...</i> ... ...	5s. od.	10d.	do.
<i>Handbook of Nyasaland, 1932</i>	5s. od.	10d.	do.
<i>Legislation.</i>			
Revised Laws of Nyasaland to 1933 (3 vols.).	£1 per vol.	1s. 6d. per vol.	do.
Orders in Council, Proclamations and Government Legislative Measures. Annual 1934.	7s. 6d.	9d.	do.
Ditto, 1935 ... ...	5s. od.	6d.	do.
Ditto, 1936 ... ...	7s. 6d.	6d.	do.
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Comprehensive Index to Laws in force on 31st December, 1937.	3s. 6d.	2d.	do.
Law Reports, Vol. III.	3s. 6d.	3d.	do.

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<i>Annual Departmental Reports.</i>			
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Water Supply Investigations Progress Report No. 6.	2s. 6d.	2d.	do.
<i>Miscellaneous Publications.</i>			
Nyasaland Annual Report.	2s. od.	2d.	H.M. Stationery Office, York House, Kingsway, London.
Census Reports, 1911, 1921, 1926, 1931.	5s. od.	-	Government Printer, Zomba.
Native Education Conference Report, 1937.	3s. 6d.	2d.	do.
Finance Commission Report, 1924.	2s. 6d.	2d.	do.
Road Guide, 1932.	1s. od.	2d.	do.
Emigrant Labour Report, 1935.	5s. od.	4d.	Crown Agents for the Colonies, 4, Millbank, London; or Government Printer, Zomba.
Land Bank Report, 1936.	1s. od.	2d.	do.
Post Office Guide and Directory, 1937.	2s. od.	3d.	Postmaster - General, Zomba,
Telephone Directory, 1937.	6d.	1d.	do.
<i>Agriculture.</i>			
Tobacco Culture (Hornby) 1926	3s. 6d.	3d.	Director of Agriculture, Zomba.
Handbook on Cotton and Tobacco Cultivation in Nyasaland (McCall) 1920	5s. od.	3d.	Crown Agents for the Colonies, 4, Millbank, London.
Report on Tea Cultivation and its Development in Nyasaland (Mann) 1933	2s. 6d.	2d.	Government Printer, Zomba.

<i>Title of Publication.</i>	<i>Published Price.</i>	<i>Cost of Postage to U.K.</i>	<i>Where obtainable.</i>
Native Agricultural Committee Report, 1930.	6d.	2d.	Government Printer, Zomba.
<i>Bulletins — Agronomic Series.</i>			
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<i>Geology.</i>			
The Physiography, Geology and Mineral Resources of Nyasaland.	1s. od.	2d.	Director of Geological Survey, Zomba.

\* Bulletins for local issue only.

<i>Title of Publication.</i>	<i>Published Price.</i>	<i>Cost of Postage to U.K.</i>	<i>Where obtainable.</i>
<i>Bulletins.</i>			
No. 3—The Limestone Resources of Nyasaland.	2s. 6d.	3d.	Director of Geological Survey, Zomba.
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